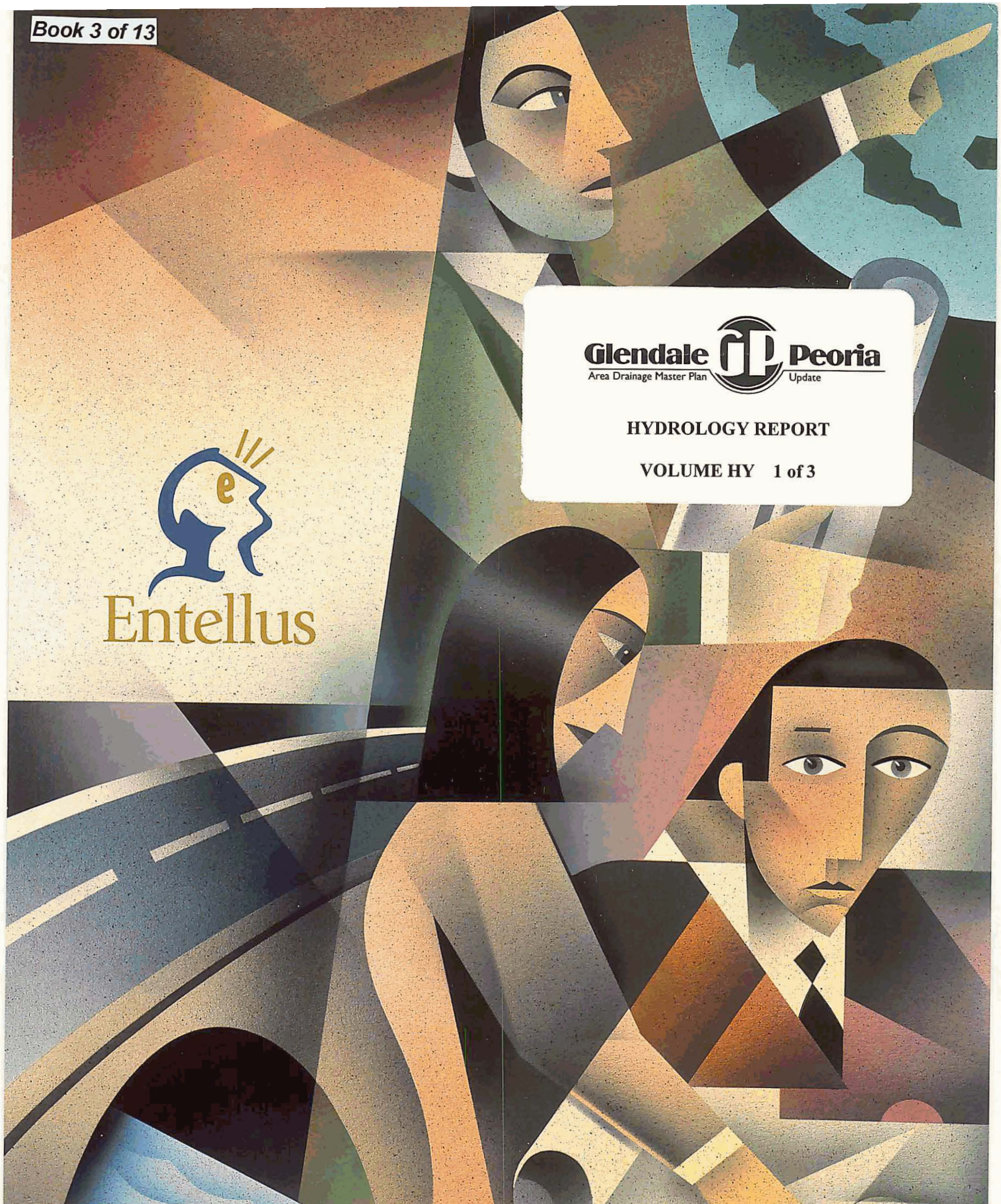
Book 3 of 13



Glendale Peoria
Area Drainage Master Plan Update

HYDROLOGY REPORT

VOLUME HY 1 of 3

Entellus

Flood Control District of Maricopa County

GLENDALE

CITY OF PEORIA

Glendale Peoria
Area Drainage Master Plan Update

HYDROLOGY REPORT

VOLUME HY 1 of 3

Contract FCD 99-44

May 30, 2001

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VOLUME DESIGNATION

VOLUME ID	Volume Name	Number
DC	Data Collection	1
HY	Hydrology	2
PA	Potential Alternatives	3
AA	Alternative Analysis (Level II)	4
RA	Recommended Alternatives (Level III)	5
ZA	Zone A Floodplain Delineation	6
DS	Detailed (Section 15)	7
AL	Arrowhead Lakes Hydrology	8
AR	Administrative Report (Correspondence)	9

Note: Volume ID will be used for Section, Plate, Figure, and Table identifiers.

Glendale/Peoria Area Drainage Master Plan Update

FCD 99-44

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The modified HEC-1 model with the proposed capital improvements can be found in Appendix H of the *Glendale/Peoria Area Drainage Master Plan – Recommended Alternative – Volume RA.*

Glendale/Peoria Area Drainage Master Plan Update
FCD No. 99-44

TECHNICAL DATA NOTEBOOK (TDN)
HYDROLOGY

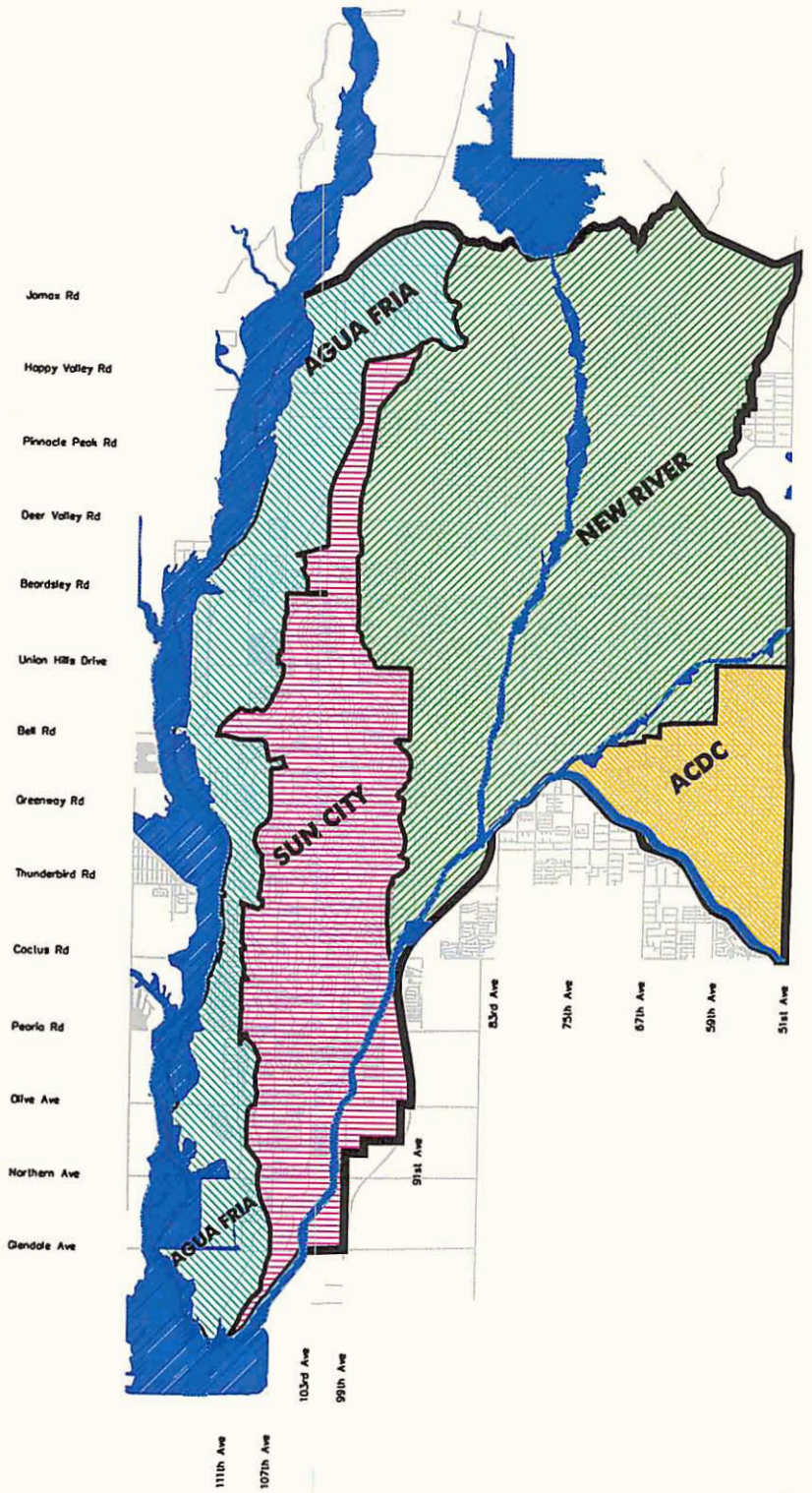
SECTION HY-1: INTRODUCTION

The information and analysis presented in this hydrology report is a part of the scope of work performed by Entellus, Inc. for the Flood Control District of Maricopa County (District) under Contract FCD No. 99-44. The purpose of this report is to present and summarize the results of the Hydrology Analysis Task for this project. In addition, it documents the methodology, assumptions, problems and solutions encountered during the development of the hydrology models. The 100-year, 6-hour existing condition HEC-1 model was modified to include the proposed capital improvements from the Level III analysis and is included in Appendix H of the *Glendale/Peoria Area Drainage Master Plan – Recommended Alternative – Volume RA*.

The purpose of this project is to provide an Area Drainage Master Plan Update (ADMP) for the *Glendale/Peoria* area study, completed in May 1987 (**Reference 1**), by quantifying the extent of flooding problems and developing alternative solutions.

The area is traversed or bounded by several major natural watercourses (see **Figure HY-1**), mainly: The Agua Fria River, the New River and Skunk Creek. Additionally, several man-made flow control structures and channels are encountered in the region including the New River Dam, the Arizona Canal Diversion Channel (ACDC), the Westbrook Village detention basins and several other smaller channels and detention basins.

The study area consists of several regions in different stages of development. North of Pinnacle Peak Road, the locale is mainly undeveloped and is characterized by steep hills draining into flat valleys. This region contains several washes that have not been significantly affected by development. However, several developments are either under construction or in the planning stage. The entire area will most likely be completely developed within the next ten years.



Entelus

GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

IN ASSOCIATION WITH:
PENTACORE ARIZONA
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GLENDALE/PEORIA ADMP
SUB-AREA BOUNDARIES
FIGURE HY-2

Between Pinnacle Peak and Beardsley Roads the area is developed more extensively than the area north of Pinnacle Peak Road, and all natural drainage paths within this area have been significantly altered. The drainage system in this part is mainly man-made and was mostly constructed by individual developers. Therefore, inconsistencies on channel continuity and cross section geometry are common in this area.

Between Beardsley Road and Northern Avenue, the area, which includes the master planned communities of Sun City, Youngtown, and portions of Glendale (including the ACDC) and Peoria, is almost fully developed. For the most part, the drainage infrastructures are already in place. However, the increasing development in the upstream area has caused a large impact to the drainage system in this area.

South of Northern Avenue, the area is mostly industrial or undeveloped. This area is located between the Agua Fria River and the New River. The entire area is a mile or less from a river outfall and no flooding problems have been reported.

SECTION HY-2: ADWR/FEMA FORMS

This section does not apply to this report.

SECTION HY-3: MAPPING AND SURVEY INFORMATION

3.1 Field Survey Information

Field surveys were conducted to supplement aerial topographic mapping of the problem areas and to establish Elevation Reference Markers (ERM's). The results of the field survey are documented in the *Glendale/Peoria ADMP Update Survey Report*, which is included in the *Glendale/Peoria Area Drainage Master Plan - Data Collection – Volume DC.*

Vertical and horizontal controls for aerial mapping as well as mapping verification were performed by Databased Terrain Mapping, Inc., under the contract of FCD 1999C065 **(Reference 3)**.

3.2 Mapping

Mapping for this study was provided by the District from several sources including: previous studies, USGS DEM models, and the mapping developed for this project by Databased Terrain Mapping, Inc. in January 2000, under the contract of FCD 1999C065 **(Reference 3)**.

3.2.1 Watershed Map

Watershed boundaries and hydrologic parameters were obtained primarily from the 200 scale, 2-foot contour mapping generated as part of the *Arizona Canal Diversion Channel Area Drainage Master Study* (ACDC ADMS) prepared by Kaminski-Hubbard for the District **(Reference 2).** This mapping covers most of the study area. However, the western and northern portions of the study area were not covered. For these areas, the USGS 7.5 minutes quadrangle maps (**Reference 12**) and the mapping developed for the Agua

Fria River Corridor (**Reference 13**) were used for developing the hydrology parameters.

3.2.2 Soils Map

Electronic soils maps were furnished by the District's GIS Department. This mapping is a digital version of the NRCS (formerly SCS) *Soil Survey of Aguila-Carefree Area, Parts of Maricopa and Pinal Counties, Arizona* (**Reference 4**) and *Soil Survey of Central Maricopa County, Arizona* (**Reference 5**).

3.2.3 Level II and Level III Analysis Mapping

The District provided the mapping for Level II and Level III analysis. It is a 200 scale, 2-foot contour interval aerial mapping that was developed by Database Terrain Mapping, Inc. (**Reference 3).**

3.2.4 Land Use Map (Existing Conditions)

The existing land use information was obtained from the 1999 aerial photos provided by the District (**Reference 6**) and *The Aerial Photo Book – The Real Estate Atlas – Phoenix, First Quarter 1999* (**Reference 7**).

3.2.5 Land Use Map (Ultimate Development)

The ultimate land use information was obtained from the zoning maps furnished by the City of Peoria and the City of Glendale (**References 8 & 9**).

SECTION HY-4: HYDROLOGY

4.1 Method Description

The peak flows in this study area were obtained through precipitation/runoff modeling. The hydrologic modeling was performed by means of the 1991 version of the HEC-1 computer program as developed by the U.S. Army Corps of Engineers (**Reference 10**). In some of the model development, the HEC-1 Data Storage System (HEC-DSS) utility was used. The HEC-DSS utility writes a selected hydrograph to a file that can be used by other HEC-1 models. In the ADMP Update HEC-1 models, the HEC-DSS utility integrated the existing HEC-1 model data into the modeling that was developed for this study. The models were developed using Green and Ampt methodology to estimate the rainfall losses. Excess rainfall was then routed to the concentration points using the Clark Unit Hydrograph. The estimation procedures for model parameters and components were based on the *Drainage Design Manual for Maricopa County – Volume I – Hydrology* (hereinafter referred as *The Drainage Manual*) (**Reference 11**).

Schematic flow routing diagrams for runoff modeling are presented on **Plates HY-1 through HY-5F.** Duration of six hours was used as the base model for this study because it produced higher peak flows than the 24-hour storm. However, the 24-hour storm was used to analyze storage requirements. Flow through regional detention basins was modeled using the level-pool reservoir routing method. The Normal-Depth routing method was predominantly utilized for routing hydrographs from one concentration point to the next. Some hydrograph routing within the ACDC Sub-area (See Subsection 4.2.1) was accomplished using the Muskingum-Cunge methodology to comport with existing modeling.

4.2 Parameter Estimation

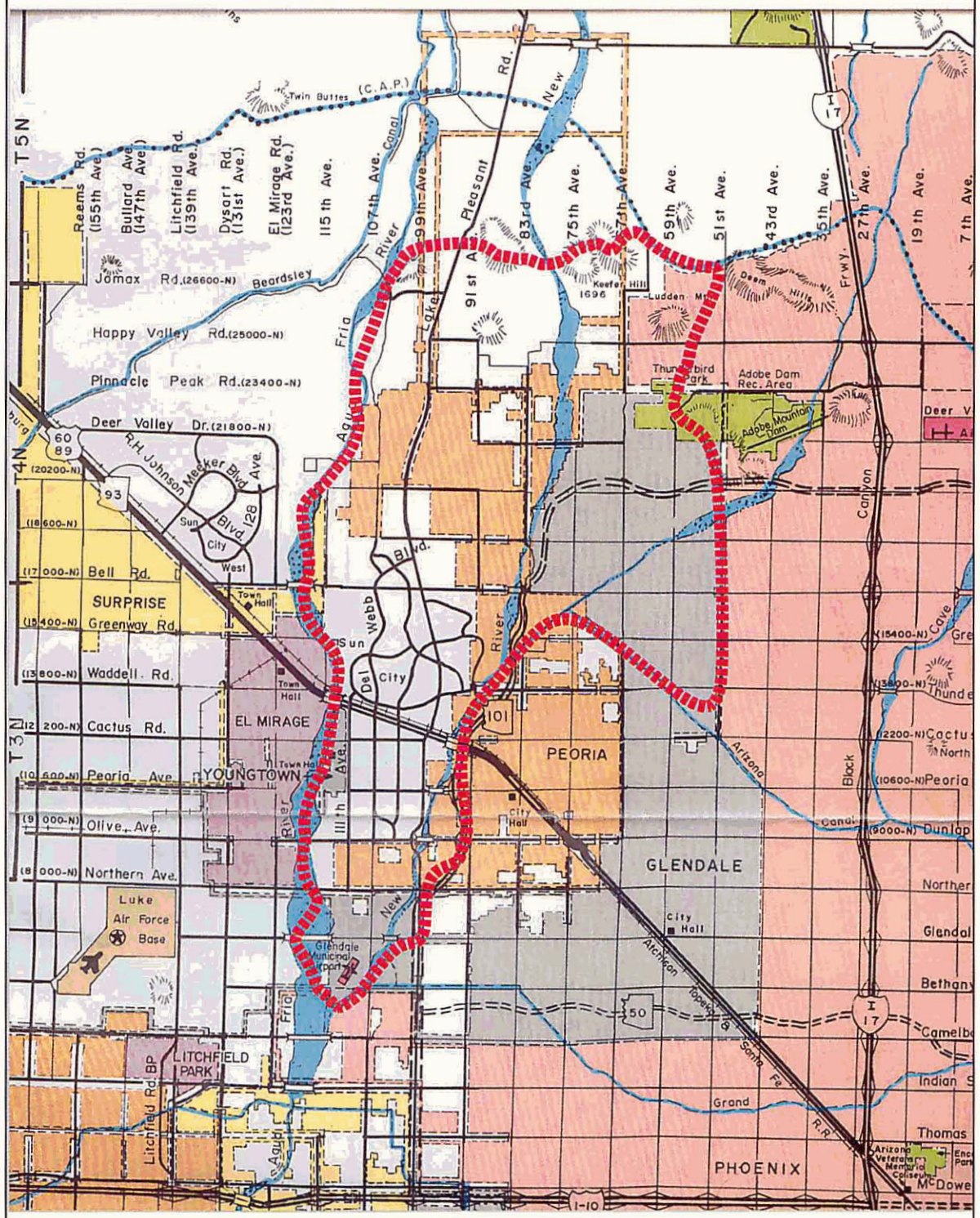
4.2.1 Drainage Area Boundary

Based on the topographic mapping information and watershed characteristics, the watershed was divided into four major sub-areas as shown in **Figure HY-2**. The first sub-area is the ACDC, which includes the portion of study area draining directly into the ACDC. The second sub-area is the New River and includes areas flowing into Skunk Creek or directly into the New River, with the exception of areas within the Sun City planned community. The third sub-area is the Sun City watershed, which includes most of Sun City, Youngtown and the surrounding upstream areas that directly contribute flow to this area. The last sub-area is the Agua Fria area, which includes the western portion of the study area that drains directly into the Agua Fria River. This sub-area includes some of the smaller basins along the western boundary of Sun City that drains directly into the Agua Fria River.

The scope of modeling within the ACDC Sub-area for this study was primarily focused on refining the existing ACDC ADMS **(Reference 2)** modeling to provide more detail in the delineation of subbasins and identification of discharge locations along the ACDC. Most of the subbasins within the ACDC Sub-area were further divided and additional flow-split locations were identified in an attempt to more precisely track the movement of runoff through the area. The HEC-DSS utility was used to import the ACDC ADMS runoff hydrograph data at key locations along the 51st Avenue alignment.

4.2.2 Watershed Work Map

The work map for this study was developed mainly from the mapping developed by Kaminski-Hubbard as part of the ACDC ADMS **(Reference 2)**.



LEGEND

- PROJECT AREA BOUNDARY

Entellus

GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

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VICINITY MAP

FIGURE HY-1

Also, a strip map along the Agua Fria River (**Reference 13**) was used. For areas not covered by either mapping, the USGS 7.5 Minutes quadrangle topographic mapping (**Reference 12**) was used.

4.2.3 Gage Data

Gaging data are available for some of the main watercourses downstream of the study area. However, the model developed for this area focuses on the overland flow through streets and parcels. Therefore, the gage data may not show good correlation for the needs of this project. The District recently installed a gage in the 91st Avenue channel. However, the period of record is too short for this gage to develop any data with statistical significance.

4.2.4 Statistical Parameters

Precipitation/runoff models were used for developing the hydrology for this area. Therefore, statistical data were not developed as part of this study. Results of the runoff models, however, were compared with gage data collected by the District for the entire county (**Reference 14**). The results appear to be within the range of expectation for this type of terrain. The comparison is presented in Subsection 4.5.2.

4.2.5 Precipitation

Precipitation data were obtained from the isopluvial maps contained in the NOAA Atlas of Arizona (**Reference 15**). Selected isopluvial maps used for Maricopa County are also encountered in *The Drainage Manual (Figures 2.1 through 2.13)* (**Reference 11**). Copies of these figures, as well as the PreFre output, are included in **Appendix E.1**.

4.2.6 Physical Parameters

4.2.6.1 Basin Parameters

Soils and land use percentages were estimated using the District's Geographic Information System (GIS) database. This information, as well as other physical parameters estimated from the work maps, was entered into the *Drainage Design Menu System* (DDMS) to obtain the Green and Ampt rainfall loss parameters. The Clark Unit Hydrograph was used in the computation of peak discharges in this study because all the subbasins are less than five square miles. Clark Unit Hydrograph parameters were calculated using the MCUHP1 module of the DDMS software. Supporting documentation and DDMS reports are included in **Appendix E.2**

4.2.6.2 Reach Routing Parameters

The Normal-Depth routing method was predominantly used to route flows from one concentration point to the next. The time steps used in the Normal-Depth equation were calculated using the velocity from the Manning's formula for the cross-section. The channel cross-section geometry used for the routings was extracted from the work map and from field observation. For similar configured reaches, typical cross sections were developed to simplify the modeling procedure.

There were a few routing reaches in the HEC-1 models that used the Muskingum-Cunge method because the Normal-Depth method resulted in unstable flows. For the ACDC Sub-area, all of the routing reaches were previously modeled using the Muskingum-Cunge method. Many of these existing reaches are unchanged in the modeling presented herein, except for modifications to the reach lengths.

Slopes and n-values for the routing reaches were estimated based on the topographic mapping, aerial photographs, and field observation. The typical cross-section sketches and tabulated reach routing parameters are included in **Appendix E.3.** The times of concentration and routing reaches for the project area are shown on **Plates HY-6 through HY-10F**.

4.2.6.3 Storage Routing Parameters

Storage for regional basins was modeled using the level-pool reservoir routing method. Stage/storage/discharge relationships were obtained from design drainage reports. Specific information is included in **Appendix E.4**. Hydrology parameters for the Westbrook Village detention basins were obtained from a detailed model developed as part of the Desert Amethyst detention basin design (**Reference 16**).

4.2.6.4 Subdivision Required Storage

Individual storage for subdivisions was estimated by calculating the 100-year, 2-hour runoff volume for areas within the subbasin that have storage. This volume was then reduced by 20% to compensate for the portion of subdivision runoff that is not affected by the detention basins. Diversion cards were used to simulate the impact of storage for all subdivisions known to meet the storage requirement, and for all future development.

For the ACDC Sub-area, many of the areas were developed on the basis of the 10-year, 2-hour retention requirements. They were

modeled with no reduction assumed in the storage. Detailed calculations of storage are included in **Appendix E.4**.

4.2.6.5 Flow Splits and Diversions

A large portion of the study area has very mild slopes, which may cause flow splits at many man-made structures, in particular at roadway intersections. Flow splits were also assumed at some locations where a future split is likely to occur due to the construction of a roadway or other drainage structure.

Flow splits were estimated using three different methods. The first method was based on the relative ratio of slopes, flow cross-sectional areas and roughness of the different flow paths. This method was mainly applied to street intersections.

The second method used the percentage of the contributing basin to determine the flow split. This method was primarily used to determine flow splits over an entire subbasin. For example, a portion of runoff may be collected in one subbasin yet flow to the concentration point of another subbasin through a storm drain. These split flow quantities were determined based on the percentage of flow contributing to both concentration points.

The third method relied on the capacity of the intercepting channel. This method was applied to model the overflow situation in a channel. It was assumed that flows up to the capacity of the channel would be conveyed in the channel, and the excess flow would overflow in its original direction.

The ACDC Sub-area is completely urbanized with streets and storm drains functioning as the main conveyors of runoff. Flow split estimates for this area were generally modeled at the major roadway intersections, and key arterial/collector street intersections. Field reconnaissance for these main areas was conducted to observe the typical conditions for each intersection type. Factors considered in developing the split flow relations included storm drain presence and capacity, curb return elevations of collector streets relative to their intersection with arterial streets, and geometry of the major arterial intersections. Two general surface split flow relations were developed; one for the arterial/arterial intersections, and the other for the collector/arterial intersections. For locations with storm drain presence, the capacity of the pipe was factored into the flow split relation. Future condition models also included the storm drains identified in the *Glendale - Peoria Area Drainage Master Plan* by CDM Inc. **(Reference 1)**, with the assumption that they will be in place ultimately. Detailed calculations of the flow splits are included in **Appendix E.5**.

At a few locations, split flow coding was added to the model in order to maintain the logic sequence of the model. These hydrographs were stored and retrieved later in the model and were not true split locations. These false diversions are noted within the model and are further discussed under the Subsection 4.3.1of this report.

4.3 Problems Encountered During the Study

4.3.1 Special Problems and Solutions

The problems and solutions encountered during the study are presented for the sub-areas shown in **Figure HY-2.**

4.3.1.1 ACDC Sub-area

Area Reduction Factors – The establishment of appropriate point precipitation area reduction factors for use in this sub-area was critical to the modeling results. The previous ACDC ADMS modeling did not employ the use of JD records, thereby making it infeasible to use JD records in the ACDC Sub-area modeling due to the HEC-DSS record compatibility issues. The results presented herein are specific to the concentration point locations along the ACDC and that numbers in the upstream watershed may not accurately represent potential peak discharges from those areas. For the 100-year flows, all point precipitation values were reduced based on the assumption that the storm would occur at the center of the approximately 20 square-mile watershed. For the 10-year flows, however, it was found that a local, one square-mile sized storm would actually dictate the peak discharges more than the accumulation of offsite flows. Accordingly, all 10-year models for the ACDC Sub-area reflect a one square-mile area reduction factor. The HEC-DSS files were kept at a 20 square-mile area reduction factors to account for the watershed they represent.

Future Conditions Flow Split at Concentration Point C107 – As proposed in the *Glendale - Peoria Area Drainage Master Plan* **(Reference 1)**, a 48-inch storm drain would ultimately be constructed in Paradise Lane between 63rd Avenue and 67th

Avenue. To accommodate the flow split in modeling this future storm drain would require a complete re-orientation of the modeling logic used for the existing conditions. In order to keep the existing and future condition models congruent, an alternate method for accounting for this flow split was developed. The appropriate split relation at C107 was developed and coded into the model. After the model was run, the resulting diverted hydrograph was hard-coded into the model using QI records. Then the model was re-run for final results.

HEC-DSS Files Manipulation – In order to effect the routing and diversion scenarios needed along 51st Avenue, some minor manipulation of the ACDC ADMS "upstream" HEC-1 files was required to set the area reduction factors and to manipulate the files to generate the appropriate hydrographs to DSS for use in the next successive model. Some minor errors were also noticed in the DSS logic for the previous ACDC ADMS modeling between the files for Volumes 1.3 and 1.5 of that study **(Reference 2)**. These errors were corrected during the development of the current DSS input files for this study.

Greenway Road and 51st Avenue Intersection – Currently, a crest exists in Greenway Road approximately 500-feet west of 51st Avenue. It appears that all flows approaching this intersection would continue southerly along 51st Avenue. However, north of Greenway Road there are five side streets that intersect 51st Avenue on the west side, and all these side street intersections have minimal curb return heights. Accordingly, it was assumed that a portion of the flows approaching Greenway Road from the north would spill westerly at some or all of the side streets. For model

simplification purposes, one lump-sum flow split was modeled directly at the intersection of Greenway Road and 51st Avenue.

4.3.1.2 New River Sub-Area

Existing Split Flow Locations - Numerous possible split flow locations were identified throughout this sub-area. Most roadway intersections tend to cause flow splits because of the relative flat slopes. Flow splits were modeled for most of the mile streets, as well as for some half-mile streets where appropriate. The relative flows in each direction were calculated based on the relative ratio of slope, flow area and roughness. Detailed calculations of flow splits are included in **Appendix E.5**.

Future Split Flow Locations - Most of the northern portion of this sub-area is currently undeveloped. However, the area is being developed at a fast rate, and most likely will be fully developed within a few years. In order to make the model compatible with future conditions, split flow coding was added to the model at assumed future roadways (mile and half mile alignments). For most of these locations, no split flow has been reported under current conditions. Therefore, some of the split flow hydrographs were set to zero in the existing conditions model.

Area Reduction Factors - The model used a multiple storm utility (JD card) to calculate area reductions. The program kept tracking the cumulative area and calculates the reduction automatically. However, when flow splits were used, the main hydrograph kept the contributing area, but the split flow hydrograph did not. In order to calculate the area reduction correctly on the split flow

hydrograph, the area was hard-coded at the return point, wherever the main and the split reconnected.

Desert Amethyst Detention Basin - The 91st Avenue drainage system includes a complex set of detention basins, split flows and routing reaches. This area was recently modeled during the design of the Desert Amethyst Basin **(Reference 16)**, which is reported to be built within the next few years. The model developed for the Desert Amethyst project was integrated into the HEC-1 model of this study.

4.3.1.3 Sun City Sub-Area

Existing Split Flow Locations - There are several split flow locations within this sub-area. Most of them are street intersections that cause splits due to inadequate conveyance capacity of the main route. Flows in various directions were calculated based on the relative ratio of slope, flow cross-sectional area and roughness. Other split flow locations include channels with sharp transitions. The inadequate capacity of the channel and the sharp transition often cause excess flow to overtop the channel and form a split.

Area Reduction Factors - The split flow locations cause the cumulative area to be dropped from the diverted hydrograph. In order to calculate the area reduction correctly for the diverted hydrograph, the area was hard-coded at the return point, wherever the main and the split reconnected. Detailed calculations of flow splits for the Sun City Sub-area are included in **Appendix E.5.**

4.3.1.4 Agua Fria Sub-Area

Existing Split Flow Locations - There are several split flow locations within this sub-area. Most of them are street intersections that cause splits due to inadequate capacity of the main route to carry the flow. Flows in various directions were calculated based on the relative ratio of slope, flow cross-sectional area and roughness. Some channels with sharp transitions within this sub-area also cause split flow. The inadequate capacity of the channel and the sharp transition would cause excess flow to overtop the channel and form a split. Detailed calculations of flow splits for the Agua Fria Sub-area are included in **Appendix E.5.**

Area Reduction Factors - The split flow locations cause the cumulative area to be dropped from the diverted hydrograph. In order to calculate the area reduction correctly for the diverted hydrograph, the area was hard-coded at the return point, wherever the main and the split reconnected.

Sand and Gravel Operations - In addition to flow-split problems, this sub-area has a number of sand and gravel operations within its boundaries. A sand and gravel operation tends to be a large pit that retains all onsite flows as well as any offsite flows that reach the site. The sand and gravel operations retention calculations were included with subdivision retention calculations that are presented in **Appendix E.4.**

4.3.2 Modeling Warning and Error Messages

4.3.2.1 ACDC Sub-Area

There were no ERROR messages in the HEC-1 models. Warning messages generated by the HEC-1 were examined to ensure that the models were not adversely affected.

The only warning messages encountered for HEC-1 models of the ACDC Sub-area are as follows:

- WARNING --- MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR FLOWS BETWEEN (*Value*) TO (*Value*)

In all but two cases the calculated peak discharges were not within the range reported and the warning messages were disregarded. The hydrographs of the two routing reaches that were within the range of the specified flows were examined. The hydrographs showed no signs of instability and the warnings were ignored.

4.3.2.2 New River, Sun-City and Agua Fria Sub-Areas

There were no ERROR messages in the HEC-1 models. Warning messages generated by the HEC-1 were examined to ensure that the models were not adversely affected.

The warning messages encountered for the 10-year, 6-hour HEC-1 model are as follows:

- WARNING --- MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR FLOWS BETWEEN (*Value*) TO (*Value*).

- WARNING --- EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
- WARNING --- TIME STEP FAILED TO CONVERGE. STABILITY PROBLEMS MAY RESULT

The first warning specified a range of flows at which routing might be numerically unstable. This warning occurred in twenty-seven routing reaches. Seventeen of them became unstable at a range specified by the program that was higher than the flow being routed and the warning was ignored. The hydrographs of the other ten that were within the range of the specified flows were examined. These hydrographs showed no signs of instability and the warning was ignored.

The second warning message listed above referred to the rainfall loss calculations performed by HEC-1 using the Green and Ampt methodology. For any particular time period, it was possible to have the rainfall intensity value smaller than the estimated infiltration rate. If this case were encountered in modeling, the HEC-1 program would automatically set the rainfall loss as zero and print out a warning message. This message is not an indication of modeling problems and should be disregarded.

The last warning message occurred in routing reach RCP91. This routing reach is a storm sewer that is under capacity for the 10-year storm. This routing reach was inserted from the Wood, Patel & Associates HEC-1 model **(Reference 16)** that was created for the Desert Amethyst Drainage project. This warning was considered inconsequential because the hydrograph showed no signs of irregularity.

The 100-year, 6-hour HEC-1 model warning messages are as follows:

- WARNING --- MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR FLOWS BETWEEN (*Value*) TO (*Value*).
- WARNING --- EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

The first warning specified a range of flows at which routing might be numerically unstable. This warning occurred in twenty-nine routing reaches. Eighteen of them became unstable at a range specified by the program that was higher than the flow being routed and the warning was ignored. The hydrographs of the other eleven that were within the range of specified flows were examined. These hydrographs for the routes showed no signs of instability, and the warning was ignored.

The second warning message was ignored for the same reasons as discussed for the 10-year, 6-hour model.

The 100-year, 24-hour HEC-1 model warning messages are as follows:

- WARNING --- MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR FLOWS BETWEEN (*Value*) TO (*Value*).
- WARNING --- EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
  WARNING --- TIME STEP FAILED TO CONVERGE. STABILITY PROBLEMS MAY RESULT

The first warning specified a range of flows at which routing might be numerically unstable. This warning occurs in thirty-eight routing reaches. Twenty-five of them became unstable at a range specified by the program that was higher than the flow being routed and the warning was ignored. The hydrographs of the other thirteen that were within the range of specified flows were examined. These hydrographs for the routes showed no signs of instability, and the warning was ignored.

The second warning message was ignored for the same reasons as discussed for the 10-year, 6-hour model.

The last warning message occurred in routing reach R2DET. This routing reach is a storm sewer that is under capacity for the 100-year, 24-hour storm. This routing reach was inserted from the Wood, Patel & Associates Inc. HEC-1 model **(Reference 16)** that was created for the Desert Amethyst Detention Basin. This warning was considered inconsequential because the hydrograph showed no signs of irregularity.

The Future 10-year, 6-hour HEC-1 model warning messages are as follows:

- WARNING --- MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR FLOWS BETWEEN (*Value*) TO (*Value*).
- WARNING --- EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
- WARNING --- TIME STEP FAILED TO CONVERGE. STABILITY PROBLEMS MAY RESULT

The first warning specified a range of flows at which routing might be numerically unstable. This warning occurs in twenty routing reaches. Fifteen of them became unstable at a range specified by the program that was higher than the flow being routed and the warning was ignored. The hydrographs of the other five that were within the range of specified flows were examined. These hydrographs showed no signs of instability, and the warning was ignored.

The second warning message was ignored for the same reasons as discussed for the 10-year, 6-hour model.

The last warning message occurred in routing reach RCP91. This routing reach is a storm sewer that is under capacity for the 10-year, 6-hour future storm. This routing reach was inserted from the Wood, Patel & Associates Inc. HEC-1 model **(Reference 16)** that was created for the Desert Amethyst Detention Basin. This warning was considered inconsequential because the hydrograph showed no signs of irregularity.

The Future 100-year, 6-hour HEC-1 model warning messages are as follows:

- WARNING --- MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR FLOWS BETWEEN (*Value*) TO (*Value*).
- WARNING --- EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
- WARNING --- TIME STEP FAILED TO CONVERGE. STABILITY PROBLEMS MAY RESULT

The first warning specified a range of flows at which routing might be numerically unstable. This warning occurs in eighteen routing reaches. Eleven of them became unstable at a range specified by the program that was higher than the flow being routed and the warning was ignored. The hydrographs of the other seven that were within the range of the specified flows were examined. These hydrographs showed no signs of instability and the warning was ignored.

The second warning message was ignored for the same reasons as discussed for the 10-year, 6-hour model.

4.4 Calibration

There is no adequate gagging data or reliable high water marks to make an accurate calibration of the model. However, results were compared to other similar areas within Maricopa County where gaging records exists and the results appeared to be reasonable.

4.5 Final Results

4.5.1 Hydrologic Analysis

Results of the hydrologic analysis including the HEC-1 input files are presented in **Appendices D, G, H, J, and I.** The summary of flows for each model is shown in **Table HY-1,** which is presented in **Appendix E.6.**

4.5.2 Verification of Results

As mentioned previously, historical gagging records are not available for the study area. However, the District has established a chart to describe the general relationship between peak discharges and watershed size for Maricopa County **(Reference 14)**. In this study, the estimated peak discharges at key

locations were plotted on the District's chart for comparison purposes. As presented in **Figure HY-3**, the estimated values of peak discharges are in general agreement with the correlation curves developed by the District based on gaging information.

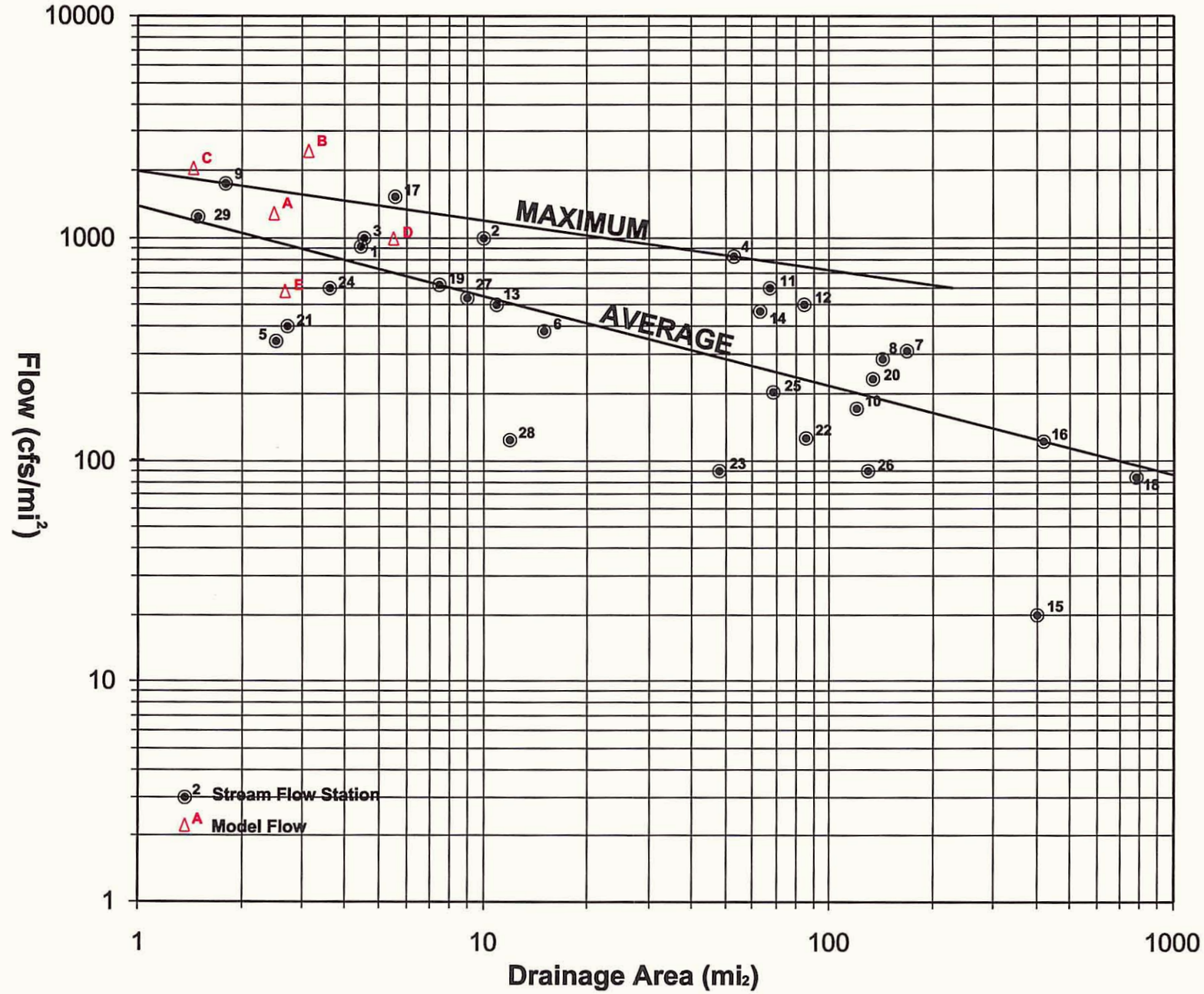


FIGURE HY3
VERIFICATION OF RESULTS

SECTION HY-5: HYDRAULICS

Hydraulic analysis is not part of this report.

SECTION HY-6: EROSION AND SEDIMENT TRANSPORT

Erosion and sediment transport is not a part of the scope for this project.

SECTION HY-7: DRAFT FIS DATA

Draft FIS Data is not a part of this report.

APPENDIX A. REFERENCES

A.1. Data Collection Summary

The following **Table HY-2** summarizes the data collected as part of this study.

A.2. Reference Documents

1 CDM INC. and JM Montgomery Inc., *Glendale - Peoria Area Drainage Master Plan*, May 1987

2 Kaminski-Hubbard Engineering, Inc. *Arizona Canal Diversion Channel Area Drainage Master Study*, Volumes 1.2, 1.3, & 1.5, May 1995

3 Databased Terrain Mapping, Inc. *Glendale/Peoria ADMP Update Aerial Mapping*, January 2000.

4 U.S. Department of Agriculture, Soil Conservation Service, *Soil Survey of Aguila-Carefree Area*, April 1986.

5 U.S. Department of Agriculture, Soil Conservation Service, *Soil Survey of Maricopa County, Arizona-Central Part*, April 1986.

6 Flood Control District of Maricopa County, *Aerial Photographs*, First Quarter 1999.

7 Rupp Aerial, *The Aerial Photo Book- The Real Estate Atlas - Phoenix.* Third Quarter, 1999.

8 Glendale Planning Department, *City of Glendale Zoning Map*, Current

9 City of Peoria, *Peoria Zoning Map*, City of Peoria, Arizona, 1991

10 U.S Department of Army, Corps of Engineers, Hydrologic Engineering Center, *Generalized Computer Program 723-X6-L2010, HEC-1 Flood Hydrograph Package*, Davis California, February 1981, Revised May 1991.

11 Flood Control District of Maricopa County, *Hydrology Design Manual for Maricopa County, Arizona, Volume 1- Hydrology*, January 1995.

12 U.S. Department of interior, Geological Survey, 7.5 Minutes Series Topographic Maps, Scale 1:24,000,

13 Aerial Mapping Company, *Agua Fria River Study*, February 1995.

14 Flood Control District of Maricopa County, Internal Memorandum. "Flood Frequency Analysis of Stream Flow Stations", Russ Cruff, FCDMC, April 1996.

15 U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, *Precipitation-Frequency Atlas of the Western United States, Volume VIII – Arizona*, 1993

16 Wood, Patel & Associates Inc., *Desert Amethyst Drainage Project Design Documentation Summary for the City of Peoria*, Arizona, September 1999.

A.3. General Documentation and Correspondence

The General Documentation and Correspondence for the Hydrology Report are included in the *Glendale/Peoria Area Drainage Master Plan – Administrative Report – Volume AR.*

A.4. Survey Field Notes

The Survey Field Notes are presented in the *Glendale/Peoria Area Drainage Master Plan - Data Collection Report – Volume DC.*

TABLE HY-2
DATA COLLECTION SUMMARY

Data Number	Data Description	Prepared by	Date
1	Hydrology Update on Glendale-Peoria Area Drainage Master Study	Maxima R. De Vera	Jan. 1993
2	Master Grading and Drainage Plan	Carter Associates ,INC.	May 1989
3	Glendale-Peoria Area Drainage Master Plan	CDM INC. and JM Montgomery Inc.	May 1987
4	Concept/Routing study	Wood, Patel and Assoc. Inc.	March 1996
5	Orangewood Storm Drain Location Study	Wood, Patel and Assoc. Inc.	March 1996
6	Preliminary Drainage Report	Coe and Van Loo Consultants Inc.	April 1994
7	Glendale-Peoria-Sun City Drainage Area no.1	Hydrology Branch Engineering Div.	Jan. 1995
8	Drainage Report on Union Hills Dr.	Erikson and Salmon, Inc.	August 1987
9	Flood Damage Report on storm and flood of Aug. 16-17 1963	U.S. Army Corps of Engineers	June 1964
10	Cactus Road Storm Drain	Stanley Franzoy Corey	Nov. 1992
11	Westbrook Village East Drainage Study	Goldman, Toy and Assoc. Inc.	Oct. 1998
12	91st Ave. Drain Hydrology Update	Maxima R. De Vera	Oct. 1994
13	Desert Amethyst Drainage Project - 60% Plans	Wood, Patel and Assoc. Inc.	May 1999
14	Glendale-Peoria-Sun City Drainage Area no. 2	Hydrology Branch Engineering Div.	Jan. 1995
15	Arrowhead Ranch - Specific Area Plan and Storm Drainage Plan	Dibble and Associates	April 1992
16	Storm Water Master Plan - City of Peoria	JM Montgomery Inc.	April 1985
17	Desert Amethyst Drainage Master Plan	Montgomery Watson	July 1997
18	Preliminary Drainage Report for Intersection Improvements	Hendrich, Eberhart and Assoc., Inc	August 1995
19	500' Swath/Intersection Drainage Plan	Kaminski Hubbard Engineering Co.	July 1993
20	Storm Water Management Plan	Camp Dresser and McKee Inc.	Jan. 1986
21	Glendale General Plan	City of Glendale	Sept. 1987
22	City of Peoria Master Plan of Storm Drainage - Executive Summary	J.M. Montgomery Inc.	April 1988
23	Storm Water Management Plan Capitol Improvement Sum.	Camp Dresser and McKee Inc.	Jan. 1986
24	Storm Drain along Cactus Road - Proposal	Steve Corrales Engineering Co.	Sept. 1990
25	Concept/Routing study	Wood, Patel and Assoc. Inc.	March 1996
26	Final Drainage Report for Eagle Canyon	American Engineering Co.	Jan. 1998
27	Lake Pleasant Road Corridor Study	Kirkham Michael Engineers	May 1999
28	Glendale-Peoria area Drainage Master Plan	CDM INC. and JM Montgomery Inc.	May 1987
29	Revisions to Final Drainage Report Deer Village Unit 1	Coe and Van Loo Consultants Inc.	March 1997
30	Silverton Beazer Homes HEC-RAS and HEC-FDA summary	Sage Engineering Corporation	August 1997
31	Fletcher Heights - Final Drainage Plan	CMX Group Inc.	June 1996
32	Deer Village Units 5&6 - Final Drainage Report	CVL Consultants, Inc	Dec. 1996
33	Dove Valley Ranch - Final Drainage Report Parcels 2,3,5	Neil/McGill Consultants,Inc.	Oct. 1998
34	Deer Village Final Drainage Report Units 1,2,3,4	CVL Consultants, Inc	Dec. 1996
35	Alta Vista Estates - Drainage Report, Units 3 and 4	CMX Group Inc.	Jan. 1998
36	Orangewood Alignment Concept/Routing Study	Wood, Patel and Assoc. Inc.	Nov. 1995
37	Addendum to Glendale-Peoria area Drainage Master Plan	CDM INC. and JM Montgomery Inc.	May 1987
38	Marinette heading canal Floodplain Removal	Coe and Van Loo Consultants Inc.	Sept. 1995
39	Gila River Basin New River and Phoenix City Streams	U.S. Army Corps of Engineers	1982
40	Final Drainage Report for Parkridge at 95th Ave and Beardsley	Coe and Van Loo Consultants Inc.	Jan. 1994
41	Marinette Heading Canal floodplain removal Request for revision	Coe and Van Loo Consultants Inc.	March 1995
42	Drainage Report For Alta Vista Estates, Units 1 and 2	CMX Group Inc.	June 1995
43	Ironwood Final Drainage Plan	CMX Group Inc.	Oct. 1998
44	Peoria Desert Lands Conservation Master Plan	Dames & Moore	Aug 1999
45	City of Peoria Parks Master Plan	Planners Ink	Feb 1996
46	Rivers Master Plan - Executive Summary	Cella Barr Associates Inc.	March 1999
47	Rivers Master Plan	Cella Barr Associates Inc.	Jan 1999
48	Trails Master Plan - Executive Summary	Cella Barr Associates Inc.	March 1999
49	Trails Master Plan	Cella Barr Associates Inc.	Jan 1999
50	Sun City Hydrologic Study	FCDMC	Nov. 1997
51	Silverton Drainage Report	Sage Engineering Corporation	Aug. 1997
52	Fletcher Heights - Preliminary Drainage Plan, Phase III	CMX Group Inc.	June 1996
53	Deer Valley Estates Drainage Plan	CMX Group Inc.	Aug. 1996
54	Fletcher Heights - Preliminary Drainage Plan, Phase II	CMX Group Inc.	July 1996
55	Fletcher Heights - Preliminary Drainage Plan Concept Overview	CMX Group Inc.	June 1993
56	Drainage Report for Calbrisa	CVL Consultants, Inc	July 1993
57	Drainage Report for Calle Lejos Estates	CMX Group Inc.	Nov. 1994
58	Drainage Report for Parcel XI at Arizona Traditions	CVL Consultants, Inc	Oct. 1998
59	Drainage Report for Parcel VIII, IX, and X at Arizona Traditions	CVL Consultants, Inc	June 1998

TABLE HY-2
DATA COLLECTION SUMMARY

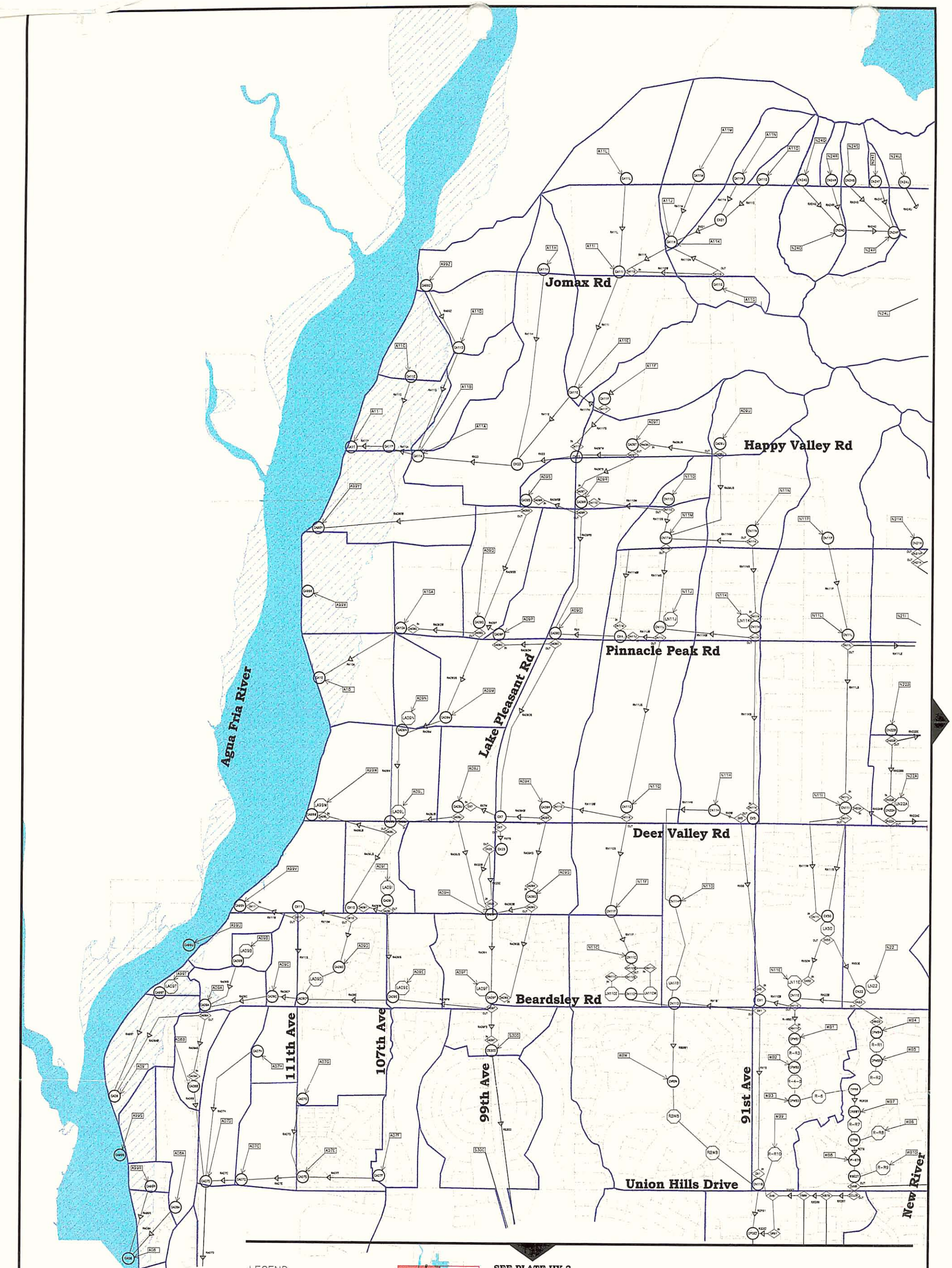
Data Number	Data Description	Prepared by	Date
60	Fletcher Heights - Preliminary Drainage Plan, Phase I Volume I of 2	CMX Group Inc.	June 1996
61	Fletcher Heights - Phase III - Evaluation of Offsite Drainage	CMX Group Inc.	Sept. 1996
62	Drainage Report for La Caille	CMX Group Inc.	Dec 1994
63	Boardwalk/Peoria Units 1&2 Preliminary Drainage Report	Erie and Associates	April 1994
64	Deer Village Final Drainage Report Units 1,2,3,4 PLATE	CVL Consultants, Inc	Dec. 1996
65	Deer Village Final Drainage Report Units 1 Revisions to Final Drainage Report	CVL Consultants, Inc	Dec. 1996
66	Final Drainage Report for Pinnacle Ranch	American Engineering Co.	Oct. 1994
68	Arrowhead Cove & Arrowhead Business Park Preliminary Drainage Report	Erie and Associates	July 1993
69	Ventana Lakes Final Drainage Report	Collar, Williams & White Engineering	
70	Bell Road Project Drainage Study Volume IV	Greiner Engineering Sciences	Oct 1987
73	New River Watercourse Master Plan-Report & Tech. Notebook	Stantech (draft)	June, 1999
74	Patrick Ranch - Final Drainage Report	Sage Engineering Corporation	March, 1994
75	Hillcrest Ranch - Master Drainage Report	Wood Patel & Associates, Inc.	August, 1991
76	Hillcrest Ranch - Phase 2 Drainage Improvements	Wood Patel & Associates, Inc.	August, 1992
77	Final Drainage for Fletcher Hts Phase 2a	CMX Group Inc.	Dec. 1997
78	Drainage Report for Arrowhead Horizons	DEA	May 1995
79	Drainage Report for Boardwalk	DEA	June, 1995
80	91st Channel plans	Dibble and Associates	Dec. 1998
81	Union Hills paving plans	Carter Associates ,INC.	1990
82	Walgreen Plans	Pasterneck	
83	Bell Rd Plans		
84	Desert Amethyst Drainage Project - 95% Plans	Wood, Patel and Assoc. Inc.	May 1999
85	Westbrook Village East Drainage Study	IMC Consultants	May 1993
86	Smith's Drainage Report	CBA	March 1998
87	Drainage Report for Hunter Ridge	DEA	Aug 1995
90	Hydrologic Analysis of Beardsley Channel extension project	FCDMC	Dec. 1990
91	Master Drainage Report for Terramar	CVL Consultants, Inc	Oct, 1996
93	West Valley Recreation Corridor Pasajes Del Rio Design Concept Report	Carter -Burgess	June, 1999
94	City of Glendale - Existing Structures Map	Unknown	**Current**
95	City of Glendale - General Plan	Glendale Planning Department	**Current**
96	87th Avenue Design Concept Report	Kimley-Horn and Assoc.	Oct 1999
97	Preliminary Drainage Report for Intersection Improvements		
98	Skunk Creek Channel Improvements - FEMA forms	FCDMC	Aug 1993
99	Final Design Report for Skunk Creek Channel Improvements	Simons, Li & Associates	June, 1998
100	ACDC / ADMS PHASE I - VOLUME 1.2	Kaminski Hubbard Engineering Co.	May 1995
101	ACDC / ADMS PHASE I - VOLUME 1.3	Kaminski Hubbard Engineering Co.	Feb. 1995
102	ACDC / ADMS PHASE I - VOLUME 1.5	Kaminski Hubbard Engineering Co.	March 1995
103	Hydrology Worksheets for Area between Skunk Creek and the ACDC	Kaminski Hubbard Engineering Co.	March 1995
104	Skunk Creek Hydrology Report	Coe and Van Loo Consultants Inc.	Nov. 1990
105	Drainage Infrastructure Report for Terramar	Coe and Van Loo Consultants Inc.	Nov. 1996
106	Area Drainage Master Study Little Deer Valley	Collar, Williams & White Engineering	July 1990
107	Policy for the Aesthetic Treatment and Landscaping of Flood Control Projects	FCDMC	Dec. 1992
108	Final Drainage Report for Hunter Field Estates	Tobar	Feb 2000
109	Preliminary Drainage Report for Summit at Sunrise Mountain	American Engineering Co.	5-2000
110	Durango ADMP -Potential Alternatives Submittal	Dibble and Associates	3-31-2000
111	Lake Pleasant Parkway Detention Basin	Goldman, Toy and Assoc. Inc.	1-2000
112	Lake Pleasant Parkway Detention Basin - Plans and bid Documents	Goldman, Toy and Assoc. Inc.	1-2000
113	Lake Pleasant Parkway Detention Basin - Addendum #5	Goldman, Toy and Assoc. Inc.	1-2000
114	Floodplain and Floodway Delineation for Rock Springs Creek	Stantec Consulting	March 2000
115	Camino A Lago Specific Plan	Urban Lands Development	Feb 1997
116	87th Avenue Final Canidate Assesment Report	DMJM	Feb 1998
117	Pinnacle Peak Road Final Canidate Assesment Report	Entranco	Oct 1999
150	101 As-Built Information	Franzoy-Corey	1991
200	Kaminski Hubbard Drainage Basins	Kaminski Hubbard Engineering Co.	
201	MAG Landuse	FCDMC	
202	SOILS	FCDMC	
203	USGS Mapping	USGS	
204	1999 Aerials	FCDMC	

TABLE HY-2
DATA COLLECTION SUMMARY

Data Number	Data Description	Prepared by	Date
300	Peoria Zoning Map	City of Peoria	12-06-99
400	Proposed Hydraulic modifications to Lake 7 - Arrowhead Lakes	Pace	May-00
401	Hydrology & Hydraulics Report for Camelot Views at Arrowhead Ranch	Clouse Emgineering Inc.	January-93
402	Drainage Report for Tierra Verde Infrastructure	Clouse Emgineering Inc.	April-95
403	Hydrology & Hydraulics Report for Arrowhead Lakes Unit 8	Clouse Emgineering Inc.	May-93
404	Drainage Report for Sierra Verde Phase II South Half	Clouse Emgineering Inc.	June-96
405	Hydrology & Hydraulics Report for Top of the Ranch One	Clouse Emgineering Inc.	September-90
406	Arrowhead Ranch Parcel I - Drainage Supplement 1	CMX	May-96
407	Drainage Report for Fulton Homes at Arrowhead Ranch Phase 1	American Engineering Company	June-92
408	Hydrology & Hydraulics Report for Arrowhead Ranch Parcel 6	Clouse Emgineering Inc.	June-93
409	Hydrology & Hydraulics Report for Arrowhead Ranch Parcels 3 & 4	Clouse Emgineering Inc.	September-93
410	Hydrology & Hydraulics Report for Tanoan & Top of the Ranch Three	Clouse Emgineering Inc.	September-93
411	Hydrology & Hydraulics Report for Arrowhead Lakes Units 5A & 5B	Clouse Emgineering Inc.	March-93
412	Drainage Report for Tierra Verde Parcel E	CVL	January-96
413	Drainage Report for Tierra Verde Parcel G	CVL	January-96
414	Drainage Report for Tierra Verde Parcel D	CVL	January-96
415	Arrowhead Enclave - Final Drainage Report	CMX	March-97
416	Final Drainage Report for Arrowhead Lakes Unit 6	Sage Engineering	May-93
417	Drainage Report for Country Club Estates at Arrowhead Ranch	CVL	February-92
418	Master Drainage Study for Continental at Arrowhead Ranch	Clouse Emgineering Inc.	December-93
419	Hydrology & Hydraulics Report for Arrowhead Ranch Parcel 2	Clouse Emgineering Inc.	February-93
420	Hydrology & Hydraulics Report for Tuscany Point	Clouse Emgineering Inc.	February-93
421	Drainage Report for Fulton Homes at Arrowhead Ranch Phase 2	American Engineering Company	October-92
422	Final Drainage Report for Arrowhead Heights	Wood/Patel	January-94
423	Addendum to Final Drainage Report for Estates at Arrowhead - Phase 1	Harrison Group	January-95
424	Hydrology & Hydraulics Report for Hillcrest Ranch Infrastructure	Clouse Emgineering Inc.	December-91
425	Drainage Report for Tierra Verde Parcel B	CVL	January-96
426	Drainage Report for Arrowhead Ranch Parcel 10	Clouse Emgineering Inc.	September-95
427	Hydrology & Hydraulics Report for Arrowhead Ranch Parcel 5	Clouse Emgineering Inc.	February-94
428	Master Drainage Study for Tierra Verde	Clouse Emgineering Inc.	November-95
429	Drainage Report for Tierra Verde Parcel N	CVL	March-96
430	Drainage Report for Tierra Verde Parcel R	CVL	March-96
431	Supplemental Drainage Report for 67th Avenue Drainage	Pivotal Companies	August-92
432	Final Drainage Report for Arrowhead Lakes Unit 7	Sage Engineering	May-93

APPENDIX B. PLATES

FULL SIZE PLATES IN VOLUME HY 3 OF 3

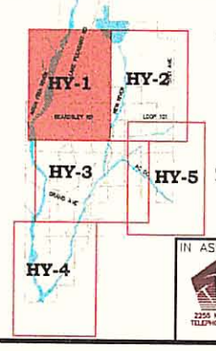


LEGEND

- Basin Boundary
- Basin
- Concentration Point
- Diversion Point
- Diversion Recovery Point
- Routing Reach
- Storage Routing
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

N

600 0 600 1200



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Phoenix, AZ 85008.3279
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Fax 602.244.8947
Project No. 310.017

GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

PLATE HY-1

HEC-1 SCHEMATIC DRAWING

FILE:310.01 P:\AUTOCAD\DFS-HYDROLOGY\PLATE HY-01.DWG DATE: 02/21/2001

New River Dam

Jomax Rd

Happy Valley Rd

Pinnacle Peak Rd

Deer Valley Rd

83rd Ave

New River

75th Ave

Loop 101

59th Ave

67th Ave

Union Hills Drive

51st Ave

SEE PLATE HY-1

SEE PLATE HY-3

SEE PLATE HY-5

LEGEND

- Basin Boundary
- Basin
- Concentration Point
- Diversion Point
- Diversion Recovery Point
- Routing Reach
- Storage Routing
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

600 0 600 1200

HY-1 HY-2 HY-3 HY-4 HY-5

SHEET INDEX

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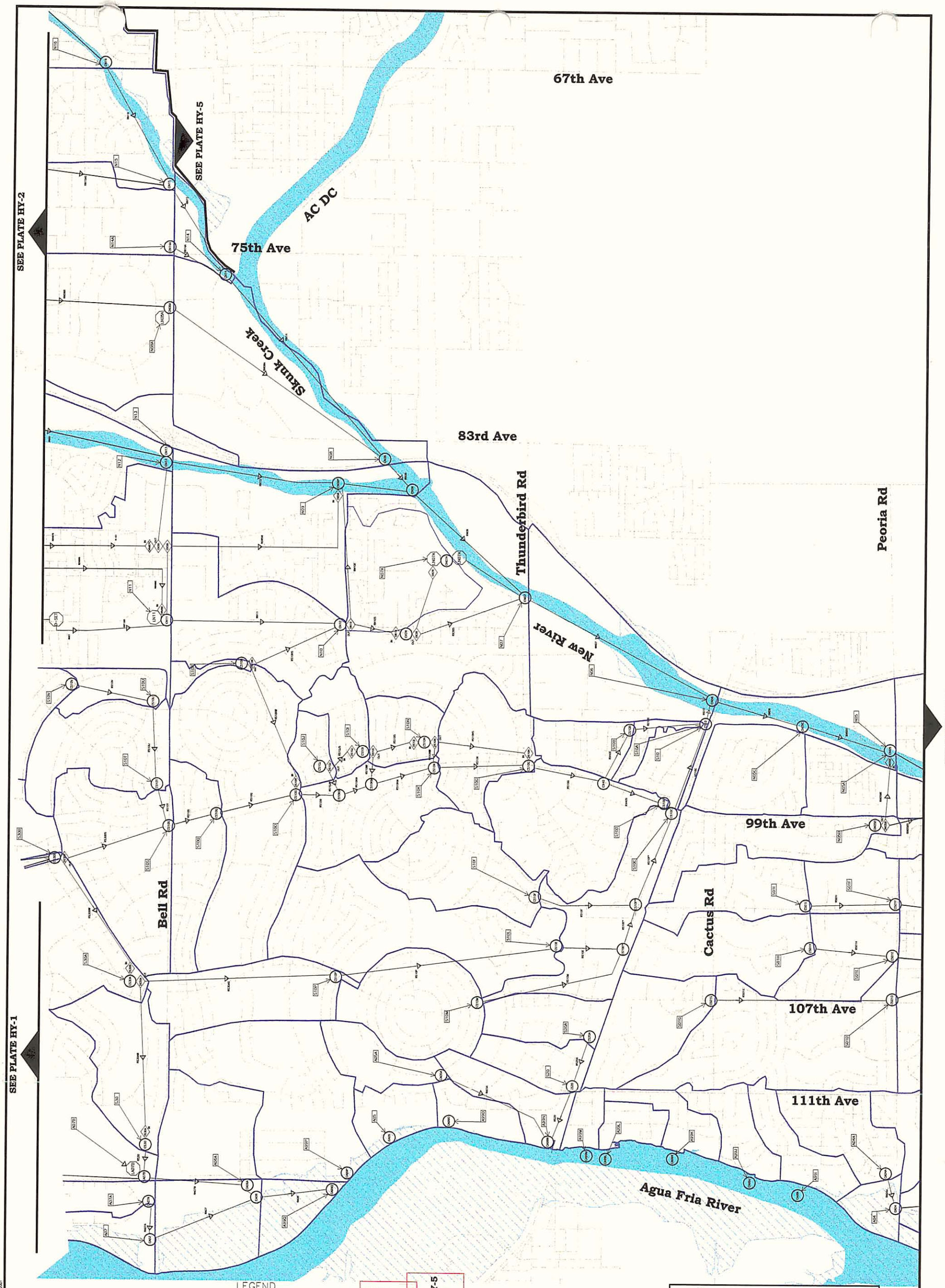
GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

PLATE HY-2

HEC-1 SCHEMATIC DRAWING

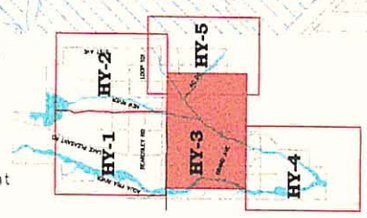


LEGEND

- Basin Boundary
- Basin
- Concentration Point
- Diversion Point
- Diversion Recovery Point
- Routing Reach
- Storage Routing
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

600 0 600 1200

SHEET INDEX



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Project No. 310.017

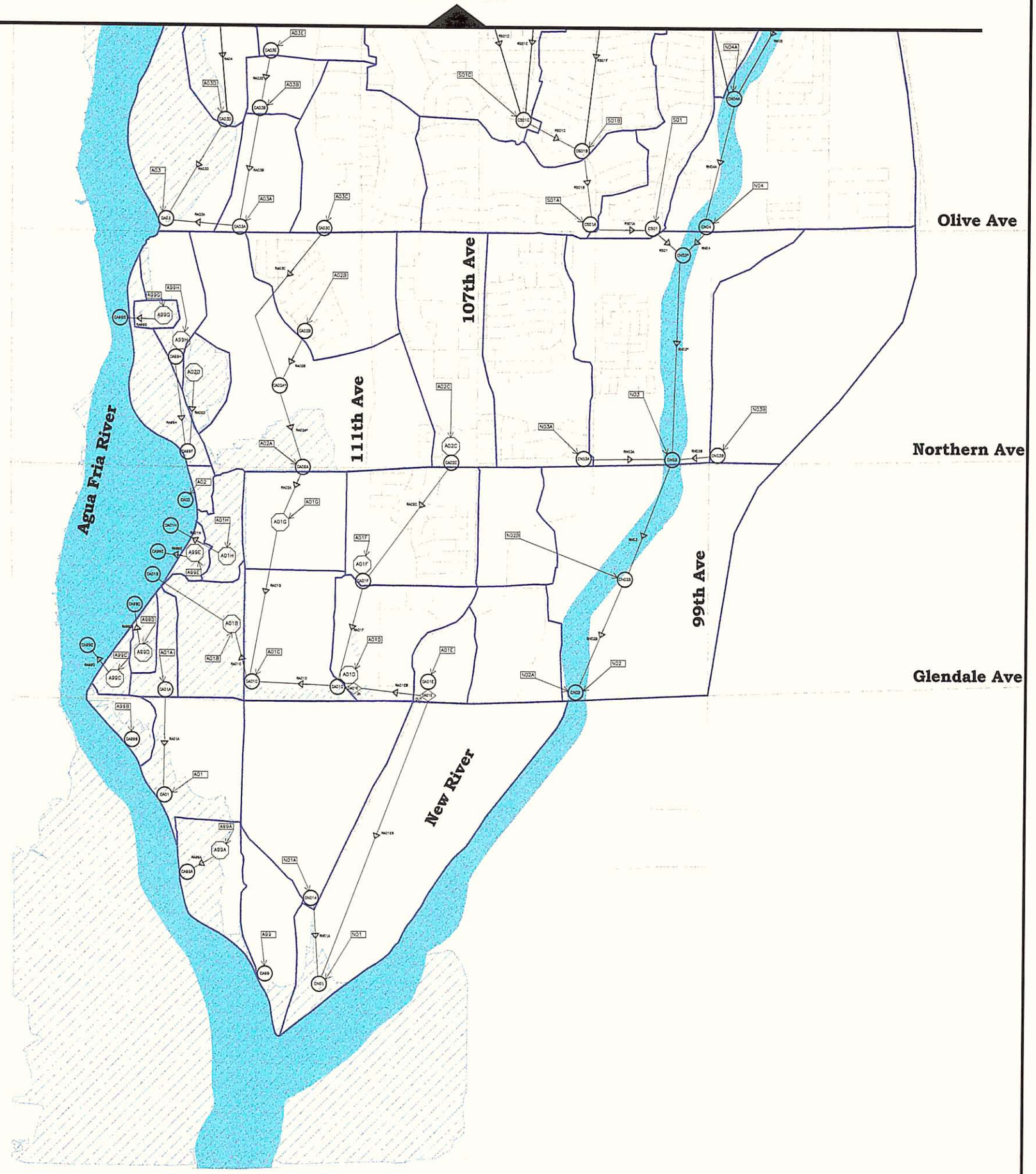
GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

PLATE HY-3

HEC-1 SCHEMATIC DRAWING

FILE: 310.017\AUTOCAD\BP1-HYDROLOGY\PLATE HY-03.DWG DATE: 03/21/2001

SEE PLATE HY-3

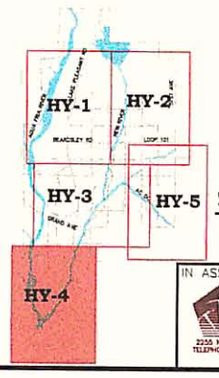


LEGEND

- Basin Boundary
- Basin
- Concentration Point
- Diversion Point
- Diversion Recovery Point
- Routing Reach
- Storage Routing
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

N

600 0 600 1200



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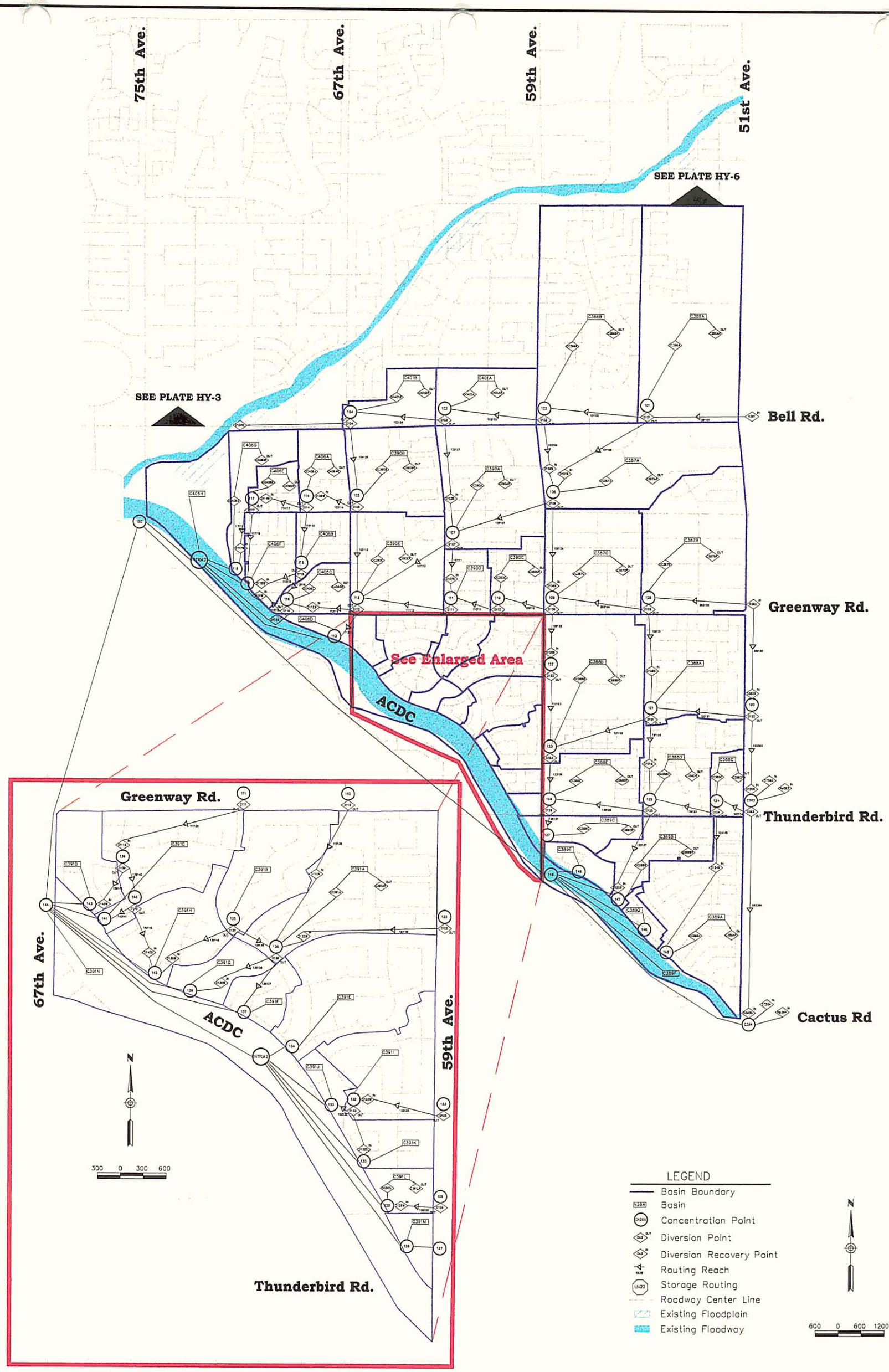
GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

PLATE HY-4

HEC-1 SCHEMATIC DRAWING

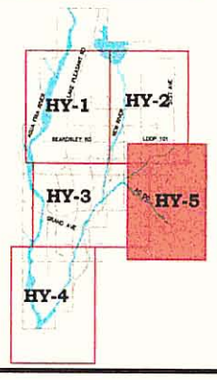
FILE: 310.017\AUTOCAD\PT-HYDROLOGY\PLATE HY-04.DWG DATE: 02/21/2001



LEGEND

- Basin Boundary
- Basin
- Concentration Point
- Diversion Point
- Diversion Recovery Point
- Routing Reach
- Storage Routing
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

600 0 600 1200



SHEET INDEX

IN ASSOCIATION WITH:

PENTACORE ARIZONA
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LTM Engineering, Inc.
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Entellus™
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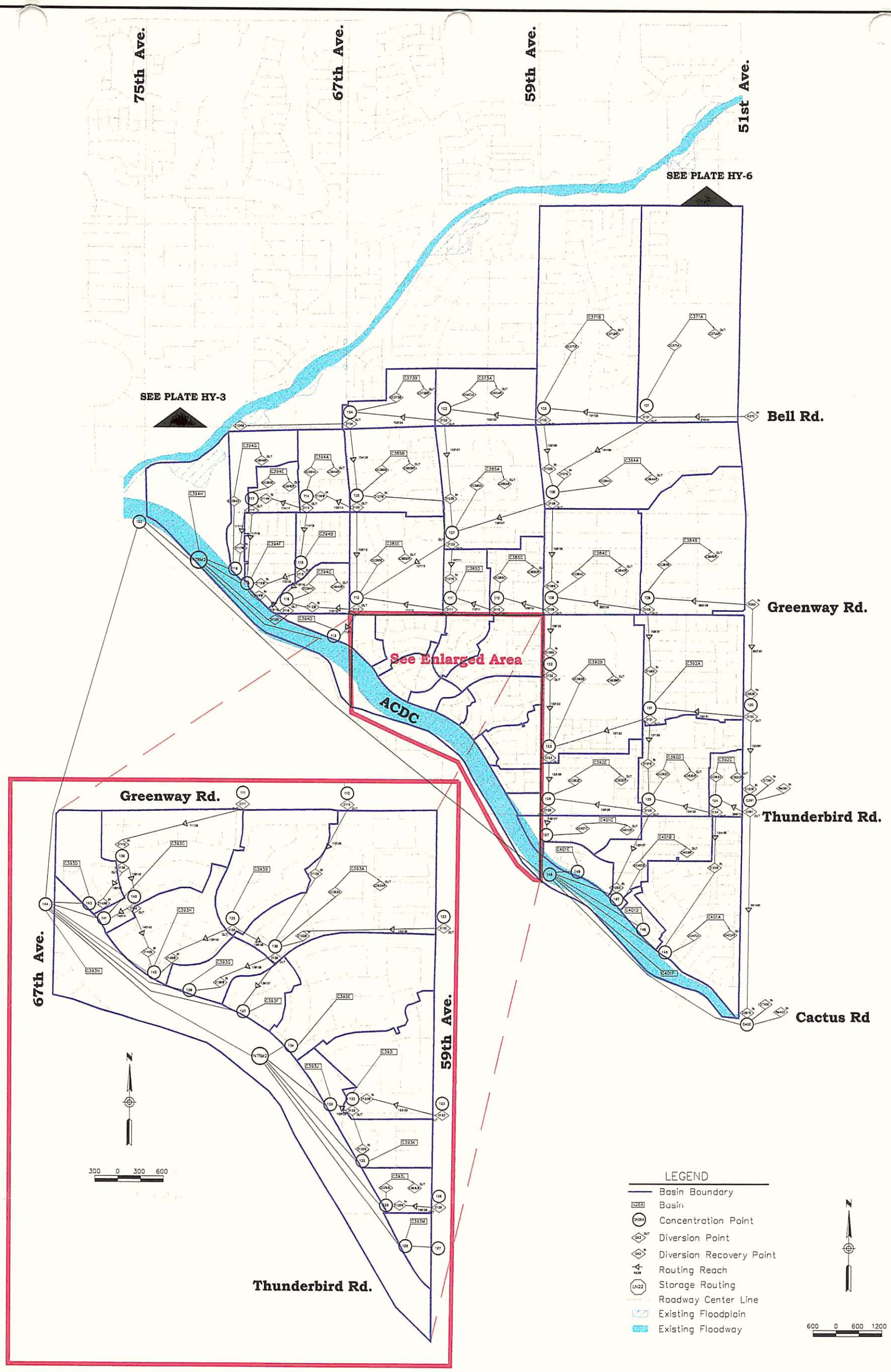
Fax 602.244.8947
Project No. 310.017

GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

PLATE HY-5E
EXISTING CONDITION
HEC-1 SCHEMATIC DRAWING

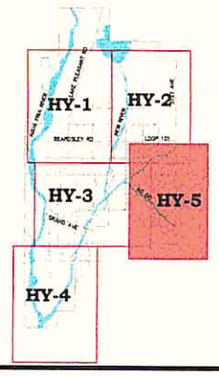
FILE:J:\SLD\PLAUTOCAD\PET-HYDROLOGY\PLATE HY-5E.DWG DATE: 02/21/2001



LEGEND

- Basin Boundary
- Basin
- Concentration Point
- Diversion Point
- Diversion Recovery Point
- Routing Reach
- Storage Routing
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

600 0 600 1200



SHEET INDEX

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GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

PLATE HY-5F

FUTURE CONDITION HEC-1 SCHEMATIC DRAWING

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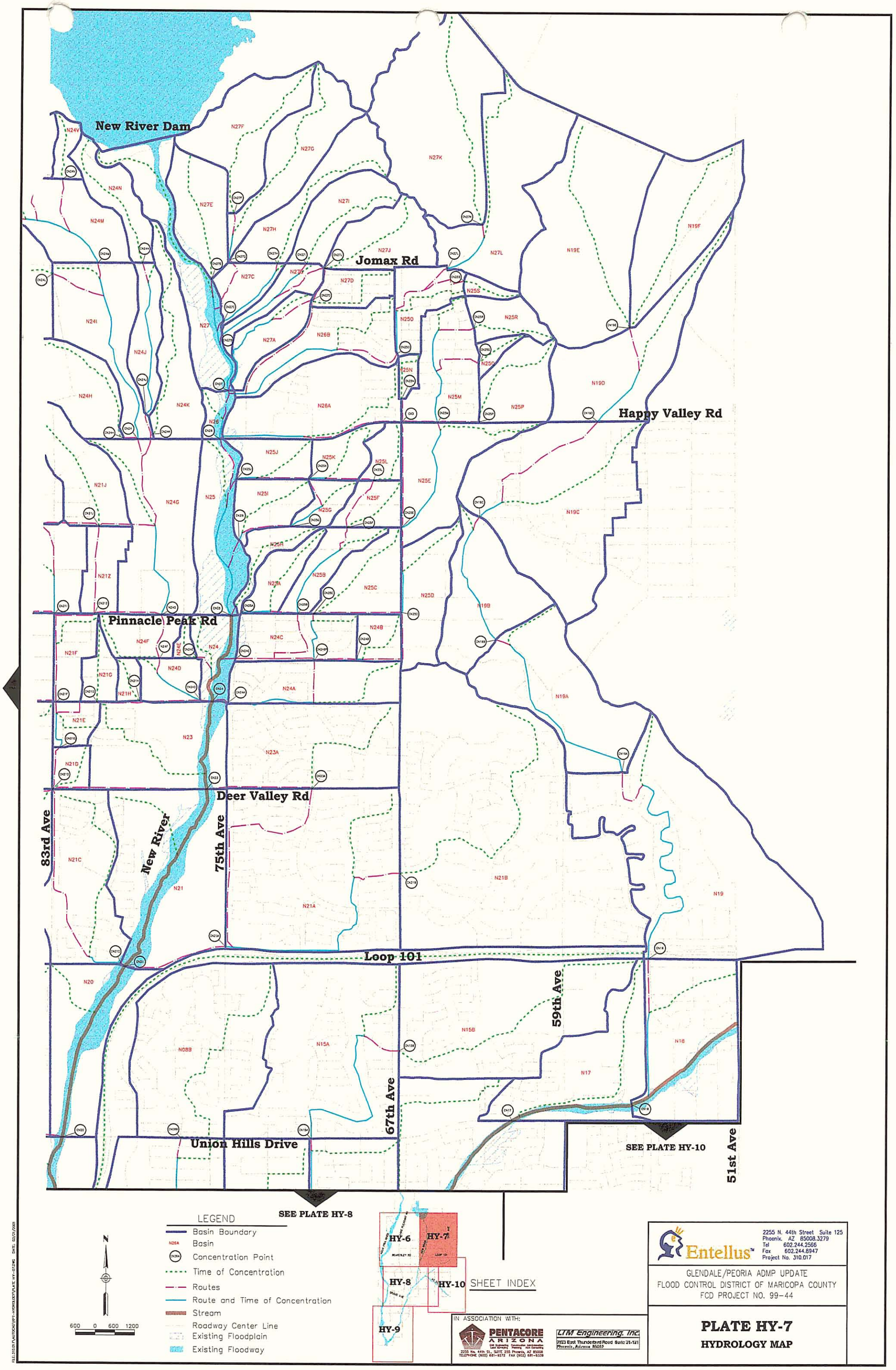
Phoenix, Arizona 85032


New River Dam
Jomax Rd
Happy Valley Rd
Pinnacle Peak Rd
Deer Valley Rd
Loop 101
Union Hills Drive
83rd Ave
75th Ave
67th Ave
59th Ave
51st Ave
New River
SEE PLATE HY-6
SEE PLATE HY-8
SEE PLATE HY-10
LEGEND
Basin Boundary
Basin
Concentration Point
Time of Concentration
Routes
Route and Time of Concentration
Stream
Roadway Center Line
Existing Floodplain
Existing Floodway
600 0 600 1200
HY-6
HY-7
HY-8
HY-9
HY-10
SHEET INDEX
IN ASSOCIATION WITH:
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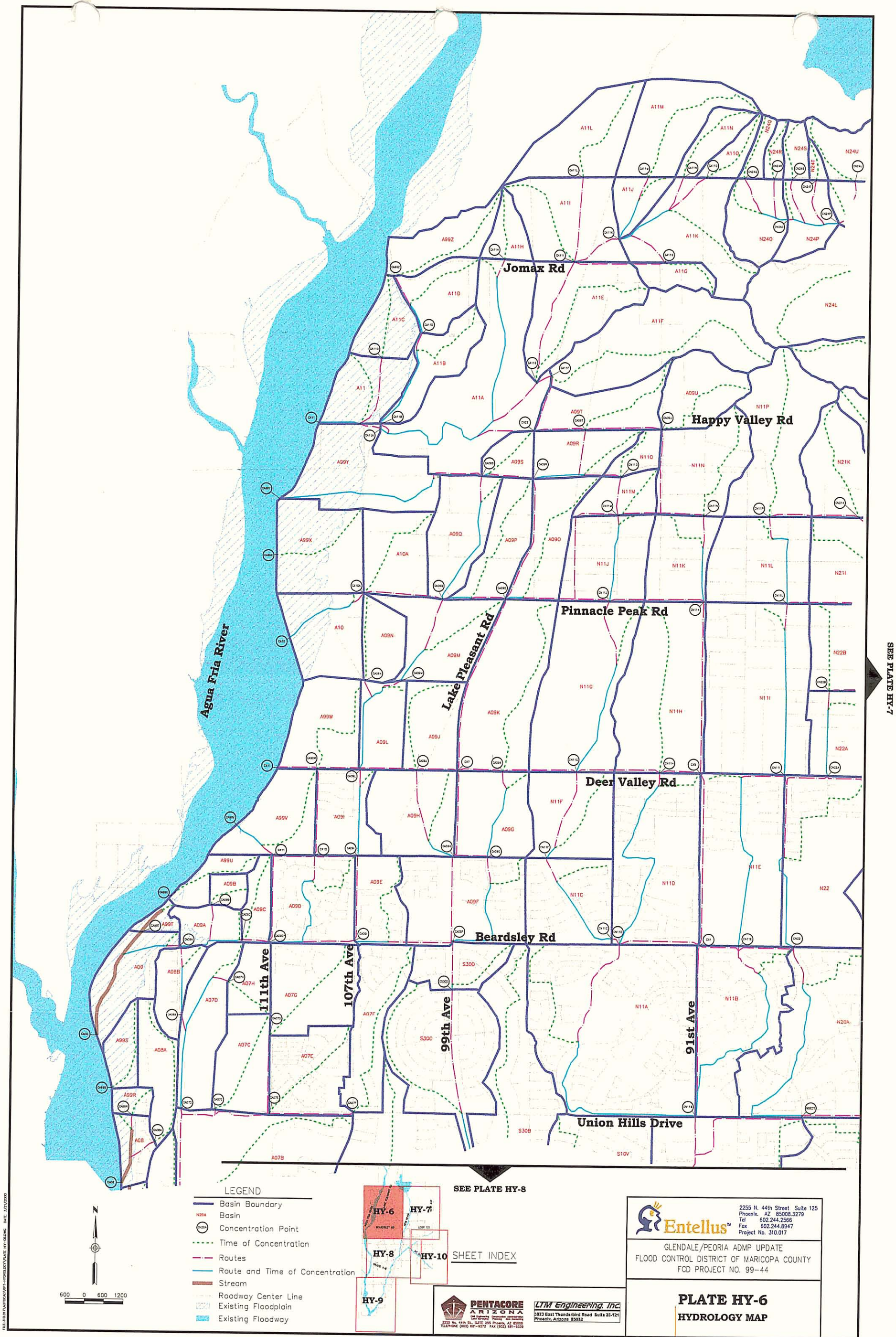
Project No. 310.017
GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44
PLATE HY-7
HYDROLOGY MAP



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Project No. 310.017

GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

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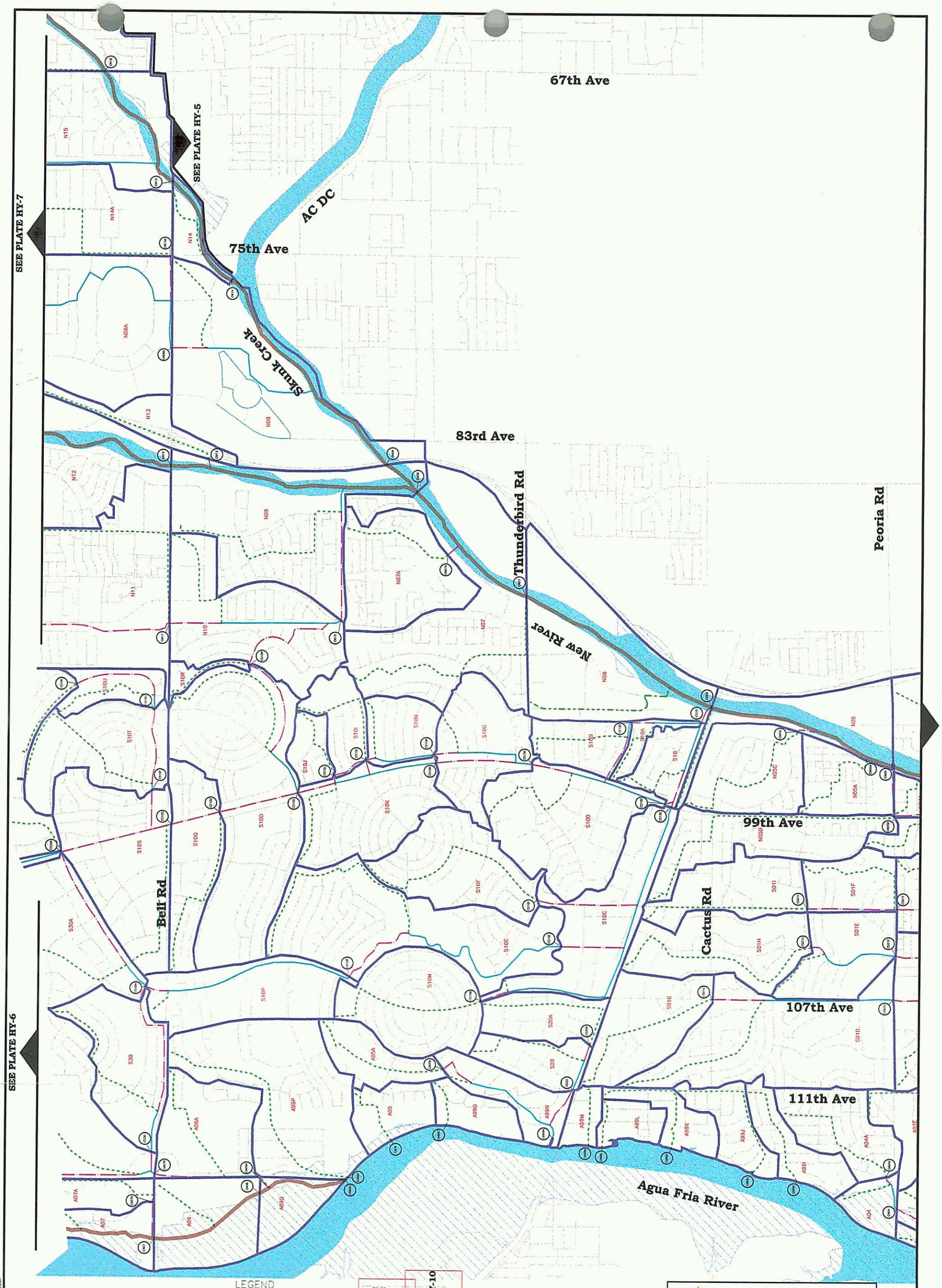
3823 East Thunderbird Road Suite 25-121
Phoenix, Arizona 85032

PLATE HY-6

HYDROLOGY MAP

FILE: 310.01 PLAT/ROAD/VEST-HYDROLOGY/PLATE HY-06.DWG DATE: 3/21/2000

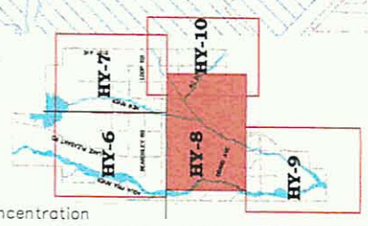


LEGEND

- Basin Boundary
- Basin
- Concentration Point
- Time of Concentration
- Routes
- Route and Time of Concentration
- Stream
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

600 0 600 1200

SHEET INDEX



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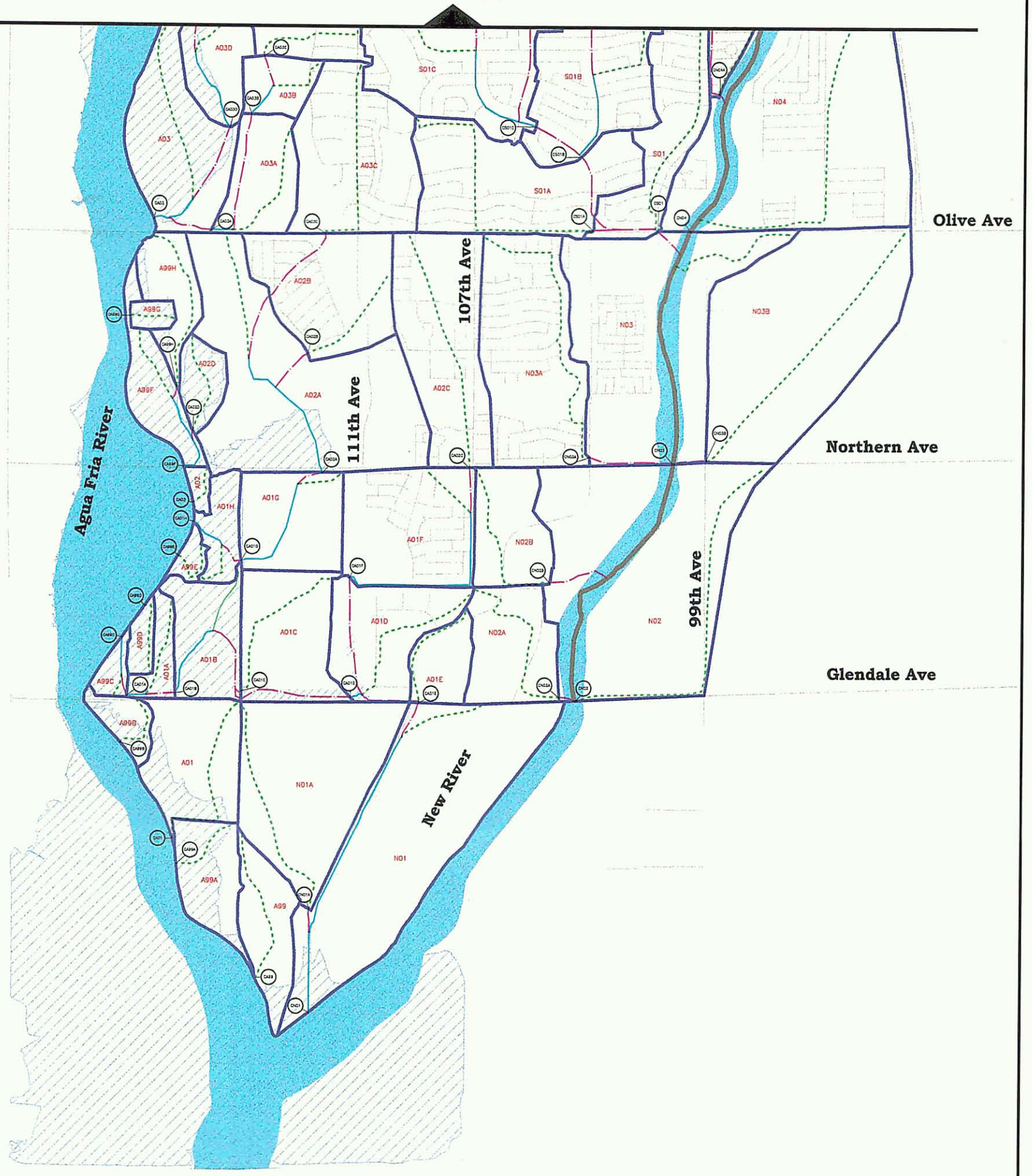
GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

PLATE HY-8

HYDROLOGY MAP

SEE PLATE HY-8

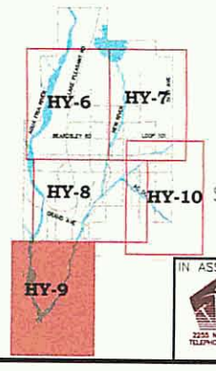


LEGEND

- Basin Boundary
- Basin
- Concentration Point
- Time of Concentration
- Routes
- Route and Time of Concentration
- Stream
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

N

600 0 600 1200



SHEET INDEX

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GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

PLATE HY-9

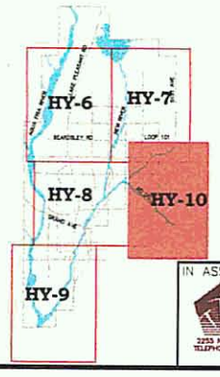
HYDROLOGY MAP

N

600 0 600 1200

LEGEND

- Basin Boundary
- N25A Basin
- (N25A) Concentration Point
- Time of Concentration
- Routes
- Route and Time of Concentration
- Stream
- Roadway Center Line
- Existing Floodplain
- Existing Floodway



SHEET INDEX

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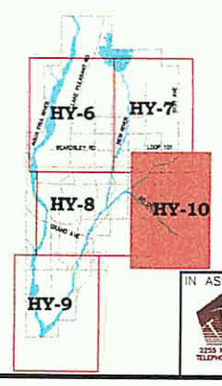
GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

PLATE HY-10E
EXISTING CONDITION HYDROLOGY MAP

LEGEND

- Basin Boundary
- Basin
- Concentration Point
- Time of Concentration
- Routes
- Routes and Time of Concentration
- Stream
- Roadway Center Line
- Existing Floodplain
- Existing Floodway



SHEET INDEX

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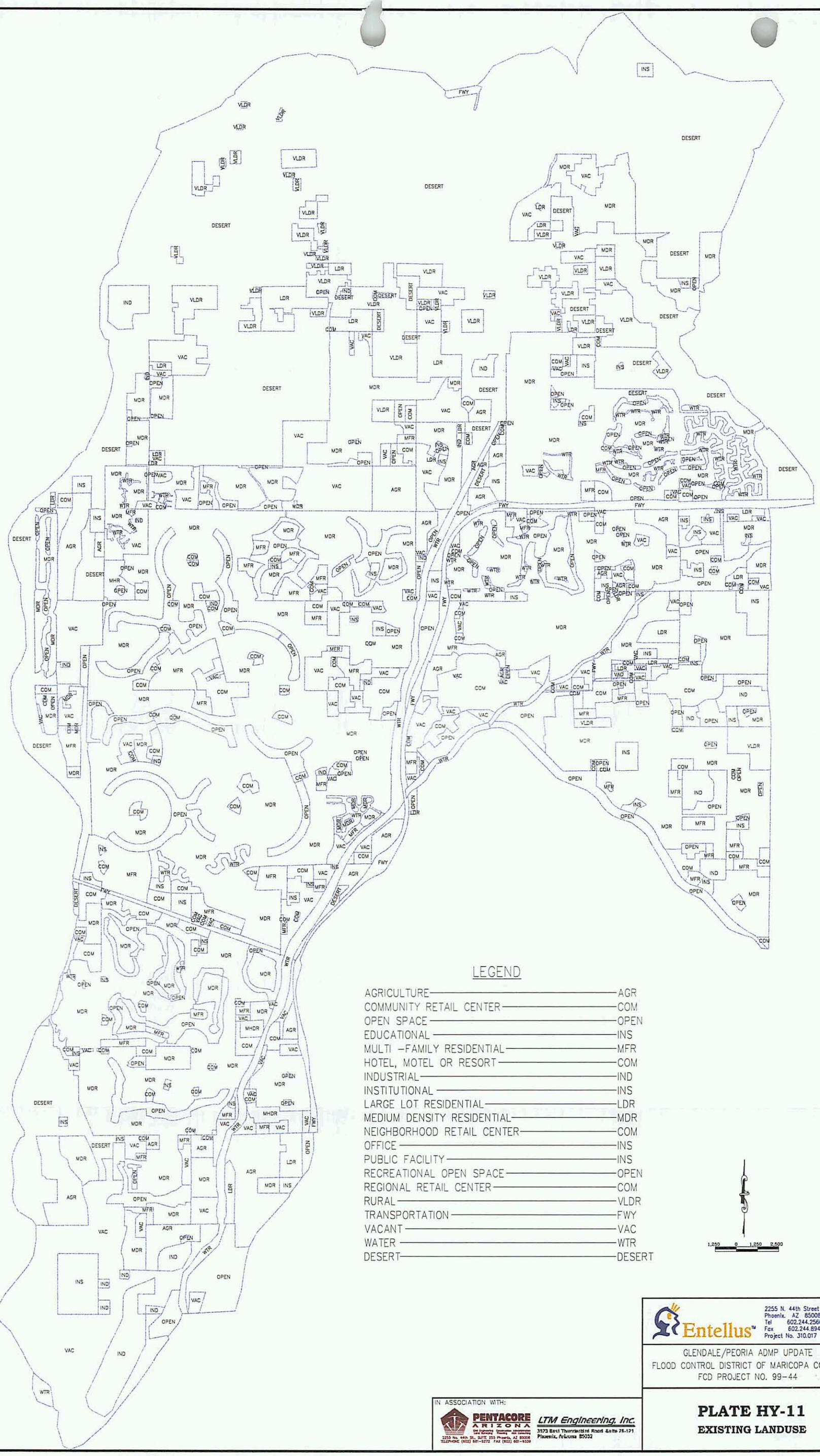
GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

PLATE HY-10F

FUTURE CONDITION HYDROLOGY MAP

FILE:3103 PLAN/TIDAD/PF1-HYDROLOGY/PLATE HY-10F.DWG DATE: 01/21/2009



LEGEND

AGRICULTURE	AGR
COMMUNITY RETAIL CENTER	COM
OPEN SPACE	OPEN
EDUCATIONAL	INS
MULTI -FAMILY RESIDENTIAL	MFR
HOTEL, MOTEL OR RESORT	COM
INDUSTRIAL	IND
INSTITUTIONAL	INS
LARGE LOT RESIDENTIAL	LDR
MEDIUM DENSITY RESIDENTIAL	MDR
NEIGHBORHOOD RETAIL CENTER	COM
OFFICE	INS
PUBLIC FACILITY	INS
RECREATIONAL OPEN SPACE	OPEN
REGIONAL RETAIL CENTER	COM
RURAL	VLDR
TRANSPORTATION	FWY
VACANT	VAC
WATER	WTR
DESERT	DESERT

1,250 0 1,250 2,500

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GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

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3973 East Thunderbird Road Suite 78-121
Phoenix, Arizona 85032

PLATE HY-11

EXISTING LANDUSE

FILE: R:\310\310017\AUTOCAD\RPT-HYDROLOGY\PLATE HY-11.DWG DATE: 3/21/2001

LEGEND

AGRICULTURE	AGR
COMMUNITY RETAIL CENTER	COM
DEDICATED OPEN SPACE	OPEN
EDUCATIONAL	INS
HIGH DENSITY RESIDENTIAL	MFR
HOTEL, MOTEL OR RESORT	COM
INDUSTRIAL	IND
INSTITUTIONAL	INS
LARGE LOT RESIDENTIAL	LDR
MEDIUM DENSITY RESIDENTIAL	MDR
NEIGHBORHOOD RETAIL CENTER	COM
OFFICE	INS
PUBLIC FACILITY	INS
RECREATIONAL OPEN SPACE	OPEN
REGIONAL RETAIL CENTER	COM
RURAL	VLDR
TRANSPORTATION	FWY
VACANT	VAC
WATER	WTR

1,250 0 1,250 2,500

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GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

IN ASSOCIATION WITH:

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LTM Engineering, Inc.
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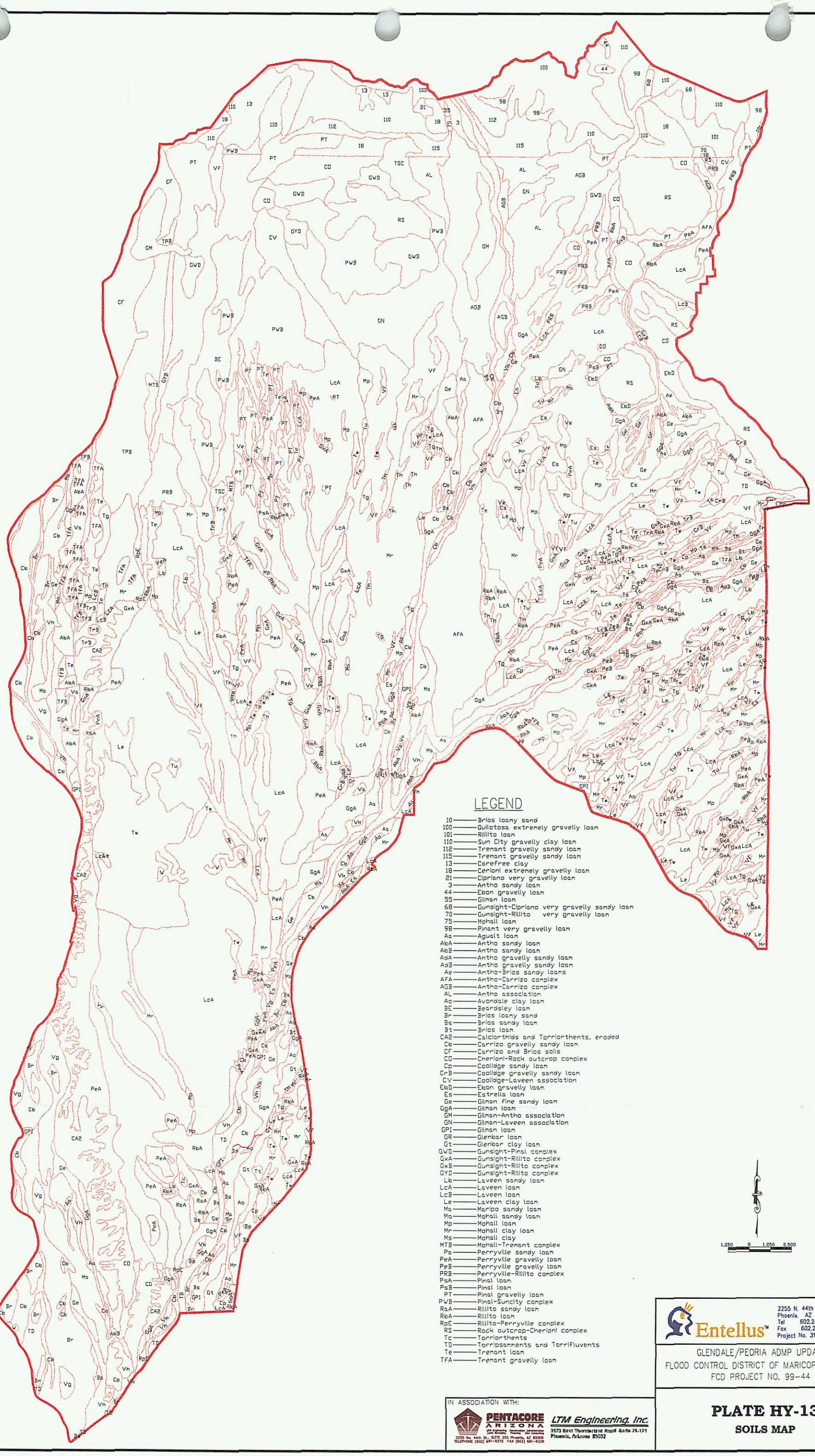
Phoenix, Arizona 85032

PLATE HY-12

FUTURE LANDUSE

FILE: R:\310\310017\AUTOCAD\RPT-HYDROLOGY\PLATE HY-12.DWG DATE: 3/21/2001



LEGEND

10 — Brios loamy sand
100 — Quilotosa extremely gravelly loam
101 — Rillito loam
110 — Sun City gravelly clay loam
112 — Tremant gravelly sandy loam
115 — Tremant gravelly sandy loam
13 — Carefree clay
18 — Cerioni extremely gravelly loam
21 — Cipriano very gravelly loam
3 — Antho sandy loam
44 — Ebon gravelly loam
55 — Gilman loam
68 — Gunsight-Cipriano very gravelly sandy loam
70 — Gunsight-Rillito very gravelly loam
75 — Mohall loam
98 — Pinant very gravelly loam
Aa — Agualt loam
AbA — Antho sandy loam
AbB — Antho sandy loam
AdA — Antho gravelly sandy loam
AdB — Antho gravelly sandy loam
Ae — Antho-Brios sandy loams
AFA — Antho-Carrizo complex
AGB — Antho-Carrizo complex
AL — Antho association
Ao — Avondale clay loam
BE — Beardsley loam
Br — Brios loamy sand
Bs — Brios sandy loam
Bt — Brios loam
CA2 — Calciorthids and Torriorthents, eroded
Cb — Carrizo gravelly sandy loam
CF — Carrizo and Brios soils
CD — Cherioni-Rock outcrop complex
Cp — Coolidge sandy loam
CrB — Coolidge gravelly sandy loam
CV — Coolidge-Laveen association
EbD — Ebon gravelly loam
Es — Estrella loam
Ge — Gilman fine sandy loam
GgA — Gilman loam
GM — Gilman-Antho association
GN — Gilman-Laveen association
GPI — Gilman loam
GR — Glenbar loam
Gt — Glenbar clay loam
GWD — Gunsight-Pinal complex
GxA — Gunsight-Rillito complex
GxB — Gunsight-Rillito complex
GYD — Gunsight-Rillito complex
Lb — Laveen sandy loam
LcA — Laveen loam
LcB — Laveen loam
Le — Laveen clay loam
Ma — Maripo sandy loam
Mo — Mohall sandy loam
Mp — Mohall loam
Mr — Mohall clay loam
Ms — Mohall clay
MTB — Mohall-Tremant complex
Pa — Perryville sandy loam
PeA — Perryville gravelly loam
PeB — Perryville gravelly loam
PRB — Perryville-Rillito complex
PsA — Pinal loam
PsB — Pinal loam
PT — Pinal gravelly loam
PWB — Pinal-Suncity complex
RaA — Rillito sandy loam
RbA — Rillito loam
RpE — Rillito-Perryville complex
RS — Rock outcrop-Cherioni complex
Tc — Torriorthents
TD — Torripsamments and Torrifluvents
Te — Tremant loam
TFA — Tremant gravelly loam

1,250 0 1,250 2,500

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GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

PLATE HY-13

SOILS MAP

IN ASSOCIATION WITH:
PENTACORE ARIZONA
LTM Engineering, Inc.
3123 East Thunderbird Road Suite 78-121
Phoenix, Arizona 85032

FILE: R:310/310017/AUTOCAD/RPT-HYDROLOGY/PLATE HY-13.DWG DATE: 3/21/2001

APPENDIX C. COMPUTER CD

APPENDIX D. 100-YR, 6-HR EXISTING CONDITIONS HEC-1 OUTPUT

AGUA FRIA, NEW RIVER, AND SUN CITY SUB-AREA MODEL

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY  1991                 *
*          VERSION 4.0.1E               *
*      Lahey F77L-EM/32 version 5.01    *
*        Dodson & Associates, Inc.      *
*      DATE  04/28/01  TIME  10:43:25   *
*****************************************
```

```
*****************************************
*                                       *
*   U.S. ARMY CORPS OF ENGINEERS        *
*   HYDROLOGIC ENGINEERING CENTER       *
*         609 SECOND STREET             *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X       XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX        XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

```
1                                   HEC-1 INPUT                                          PAGE  1

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

   1          ID   Project ID: GP - Major Basin: 01 - Return Period: 100 Years
   2          ID   ****************************************************************************
   3          ID   **                                                                        **
   4          ID   **                    Glendale/Peoria ADMP Update                         **
   5          ID   **                                                                        **
   6          ID   ****************************************************************************
   7          ID   ****************************************************************************
   8          ID   PROJECT:                Glendale Peoria ADMP Update
   9          ID   CLIENT:                 Flood Control District of Maricopa County
  10          ID   PREPARED BY:            Entellus, Inc.
  11          ID   PROJECT No:             FCD 99-44              Entellus 310.017
  12          ID   FILE NAME: 100yr6hr.DAT                     CREATED DATE: Oct 21, 2000
  13          ID   MODIFIED:
  14          ID   STORM:                  100-year 6-hour Storm
  15          ID   DEVELOPMENT CONDITIONS: Existing Conditions
  16          ID
  17          ID   DDM MCUHP1
              *
              * ***************************************************************************
  18          IT       2                    1000
  19          IO       5
              *
              *DIAGRAM
              * ***************************************************************************
              * **********************     PRECIPITATION DATA      ***************************
              * ***************************************************************************
  20          IN      15
  21          JD    3.20     0.01
  22          PC   0.000    0.008    0.016    0.025    0.033    0.041    0.050    0.058    0.066    0.074
  23          PC   0.087    0.099    0.118    0.138    0.216    0.377    0.834    0.911    0.931    0.950
  24          PC   0.962    0.972    0.983    0.991    1.000
  25          JD   3.179     0.50
  26          JD   3.120     2.80
  27          PC   0.000    0.009    0.016    0.025    0.034    0.042    0.051    0.059    0.067    0.076
  28          PC   0.087    0.100    0.120    0.163    0.252    0.451    0.694    0.837    0.900    0.938
  29          PC   0.950    0.963    0.975    0.988    1.000
  30          JD   2.950     16.0
  31          PC   0.000    0.009    0.020    0.030    0.048    0.063    0.076    0.090    0.105    0.119
  32          PC   0.135    0.152    0.175    0.222    0.304    0.472    0.670    0.796    0.868    0.912
  33          PC   0.946    0.960    0.973    0.987    1.000
  34          JD   2.598     90.0
  35          PC   0.000    0.021    0.035    0.051    0.071    0.087    0.105    0.125    0.143    0.160
  36          PC   0.179    0.201    0.232    0.281    0.364    0.500    0.658    0.773    0.841    0.888
  37          PC   0.927    0.945    0.964    0.982    1.000
  38          JD   1.824    500.0
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 39          PC   0.000   0.024   0.043   0.059   0.078   0.098   0.119   0.141   0.162   0.186
 40          PC   0.212   0.239   0.271   0.321   0.408   0.515   0.627   0.735   0.814   0.864
 41          PC   0.907   0.930   0.954   0.977   1.000
             * ******************************************************************************
             *
             *
             * ******************************************************************************
             * ******************************************************************************
             * **********************      83TH AVENUE DRAIN      ****************************
             * ******************************************************************************
             * ******************************************************************************
             *
             * *** BASIN N21K ******************************************************
             * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 42          KK    N21K   BASIN
 43          KM   SUB-BASIN N21K
 44          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 45          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
 46          KM     L =  .75  Kb = .050  Adj. Slope =  315.0
 47          BA    .229
 48          LG    0.33    0.32    4.25    0.42       6
 49          UC   0.200   0.114
 50          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 51          UA     100
             *
             *
             * *** DIVERSION DN21KL ***********************************************************
             * CALLE LEJOS @ 83RD AVE. DIVERTS FLOW INTO RET. BASIN ON SOUTHEAST
             * CORNER, MAIN FLOWS SOUTH ALONG 83RD AVE.
             * DDM   ***** Preserved *****

 52          KK  DN21KL
 53          DT  N21KI*
 54          DI       0       1      45      91     136     182     227     273     500     700
 55          DQ       0     0.6      42      85     127     137     138     139     140     141
             *
             *
             * *** DIVERSION DN21K ************************************************************
             * CALLE LEJOS & 83RD AVE. FLOW ENTERING BASIN SPLIT WITH DIVERSION
             * FLOWING EAST ALONG CALLE LEJOS AND MAIN FLOWING SOUTH ALONG 83RD AVE
             * DDM   ***** Preserved *****

 56          KK  DN21KO
 57          DT   N21KI
 58          DI       0       3       9      90     181     500     620
 59          DQ       0     1.3       4      39      78     180     200
             *
             *
             * *** ROUTE RN21KS ***************************************************************
             * ROUTE RN21KS IS 2820 FT WITH A SLOPE OF 0.0089
             * CROSS SECTION IS OPEN TO OPEN WITH A 20' WIDTH ROAD (ALONG 83RD AVE.)
             * ROUTE FLOWS ALONG 83RD AVE. FROM CALLE LEJOS (CN21I) TO PINNACLE PEAK
             * PINNACLE PEAK RD. (CN21K)
             * DDM   ***** Preserved *****

 60          KK  RN21KS
 61          RS       9    FLOW       0
 62          RC    0.04    0.03    0.04    2820  0.0089
 63          RX       0     500     525     526     546     547     572    1072
 64          RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
             *
             *
             * *** BASIN N21I *****************************************************************
             * DDM   ***** Preserved *****
                                           HEC-1 INPUT                                          PAGE  3

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 65          KK    N21I   BASIN
 66          KM   SUB-BASIN N21I
 67          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 68          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
```

```
 69          KM     L =  .83  Kb = .039  Adj. Slope =   19.0
 70          BA    .275
 71          LG    0.25    0.31    2.92    0.95       4
 72          UC   0.733   0.471
 73          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 74          UA     100
             *
             *
             * *** STORAGE ROUTING LN21I ***********************************************
             * *** EAGLE CANYON RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ************
             * DDM    ***** Preserved *****

 75          KK   LN21I
 76          DT  LN21ID     1.0
 77          DI       0     100    1000   10000
 78          DQ       0     100    1000   10000
             *
             *
             * *** COMBINE  CN21I* ***********************************************************
             * COMBINE RN11LE, RN21ZW
             * INTERSECTION OF PINNACLE PEAK RD. AND 83RD AVE. FLOW ALONG 83RD FROM NORTH
             * DDM    ***** Preserved *****

 79          KK  CN21I*
 80          HC       2
             *
             *
             * *** BASIN N21J ****************************************************************
             * DDM    ***** Preserved *****

 81          KK    N21J   BASIN
 82          KM   SUB-BASIN N21J
 83          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 84          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
 85          KM     L =  .90  Kb = .050  Adj. Slope =  309.1
 86          BA    .232
 87          LG    0.34    0.32    4.45    0.37      10
 88          UC   0.217   0.143
 89          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 90          UA     100
             *
             *
             * *** DIVERSION RECOVER DR21K*  ************************************************
             * RECOVER FLOWS ENTERING DETENTION BASIN (83RD AVE. & CALLE LEJOS)
                                          HEC-1 INPUT                                          PAGE  4

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 91          KK  DR21K*
 92          DR  N21KI*
             *
             *
             * *** STORAGE LN21K *************************************************************
             * RETENTION BASIN LOCATED ON SOUTH EAST CORNER OF 83RD Ave AND CALLE LEJOS
             * THE BASIN IS UNDER CONSTRUCTION AS PART OF THE EAGLE CANYON SUBDIVISION
             * STORAGE VOLUME AND STAGES WERE OBTAINED FROM THE DRAINAGE REPORT.
             * (#26 in DATA COLLECTION Log)
             *

 93          KK   LN21K
 94          RS       1    STOR       0
 95          SQ       0       0      50     500    2000
 96          SE    1321    1325    1328  1328.1    1330
 97          SV       0       9     9.8    9.81    9.85
 98          SE    1321    1325    1328    1330    1331
             *
             *
             * *** DIVERSION RECOVER DRN21K  *************************************************
             * RECOVER EASTERN FLOWS FROM SPLIT @ 83RD AVE. & CALLE LEJOS

 99          KK  DRN21K
100          DR   N21KI
             *
             *
```

```
            * *** ROUTE RN21KE ***********************************************************
            * ROUTE RN21KE IS 1820 FT WITH A SLOPE OF 0.0044
            * CROSS SECTION IS A SMALL ROAD WITH A FENCE ON THE WEST SIDE
            * EAST ALONG CALLE LEJOS
            * ROUTE FLOW TO CN21J FROM CN21K

 101        KK  RN21KE
 102        RS       6    FLOW       0
 103        RC    0.04    0.03    0.04    1820  0.0044
 104        RX       0       1    17.5    18.5    53.5    54.5    79.5   579.5
 105        RY    9.25    1.25    0.25       0       0    0.25    1.25    4.25
            *
            *
            * *** COMBINE  CN21J ***********************************************************
            * COMBINE BASINS N21J, RN21KE & N21KL
            * DDM   ***** Preserved *****

 106        KK   CN21J
 107        HC       3    0.46
            *
            *
            * *** DIVERSION DN21J ***********************************************************
            * MAIN FLOW SOUTH - SPLIT FLOW WEST TO ROCK SPRINGS CREEK
            * DDM   ***** Preserved *****
1                                   HEC-1 INPUT                                          PAGE  5

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 108        KK  DN21JO
 109        DT   N21JI
 110        DI       0       1     118     236     473
 111        DQ       0     0.3      36      73     146
            *
            *
            * *** ROUTE RN21JS **********************************************************
            * ROUTE RN21JS IS 2691 FT WITH A SLOPE OF 0.0054
            * CROSS SECTION IS A SMALL CHANNEL (MEASURED)
            * SOUTH AT APPROX. THE ALIGNMENT OF 81ST AVE
            * ROUTE FLOW FROM CALLE LEJOS CN21J TO PINNACLE PEAK RD
            * DDM   ***** Preserved *****

 112        KK  RN21JS
 113        RS       7    FLOW       0
 114        RC    0.05     .06     .05    2691  0.0054
 115        RX       0     350     460     480     490     510     610     910
 116        RY       7       6       5       0       0       5       6       7
            *
            *
            * *** BASIN N21Z ***************************************************************
            * DDM   ***** Preserved *****

 117        KK    N21Z   BASIN
 118        KM   SUB-BASIN N21Z
 119        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 120        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
 121        KM     L =  .52  Kb = .038  Adj. Slope =   33.0
 122        BA    .109
 123        LG    0.18    0.35    6.40    0.14       6
 124        UC   0.300   0.203
 125        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 126        UA     100
            *
            *
            * *** STORAGE ROUTING LN21Z ****************************************************
            * *** EAGLE CANYON RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ************
            * DDM   ***** Preserved *****

 127        KK   LN21Z
 128        DT  LN21ZD     2.5
 129        DI       0     100    1000   10000
 130        DQ       0     100    1000   10000
            *
            *
            * *** COMBINE  CN21Z ************************************************************
```

```
                * COMBINE BASINS N21Z AND CN21J
                * DDM   ***** Preserved *****
1                                   HEC-1 INPUT                                                    PAGE  6

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 131            KK   CN21Z
 132            HC       2
                *
                *
                * *** DIVERSION DN21Z ***********************************************************
                * SPLIT WEST TO ROCK SPRINGS CREEK ALONG PINNACLE PEAK
                * DDM   ***** Preserved *****

 133            KK  DN21ZO
 134            DT   N21ZI
 135            DI       0       1     100     200     300     400     450     500
 136            DQ       0     .05      .1      .2      .3       5      27      35
                *
                *
                * *** DIVERSION DN21Z*  *********************************************************
                * MAIN FLOWS WEST ALONG PINNACLE PEAK TO 83RD, SPLIT CONTINUES SOUTH
                * DDM   ***** Preserved *****

 137            KK  DN21Z*
 138            DT  N21ZI*
 139            DI       0       1     300     395     423     465     600
 140            DQ       0     .05      .1      10      43     150     200
                *
                *
                * *** ROUTE RN21ZW **************************************************************
                * ROUTE RN21ZW IS 871 FT WITH A SLOPE OF 0.0011
                * CROSS SECTION IS MEDIUM ROAD WITH FENCE ON WEST SIDE
                * ALONG PINNACLE PEAK RD
                * ROUTE FLOW FROM 81ST AVE (CN21Z) TO 83RD AVE, (CN21I)
                * DDM   ***** Preserved *****

 141            KK  RN21ZW
 142            RS       5    FLOW       0
 143            RC    0.05     .04     .05     871   .0011
 144            RX       0       1      15      16      56      57      82     582
 145            RY    9.25    1.25    0.25       0       0    0.25    1.25    4.25
                *
                *
                * *** BASIN N21P ****************************************************************
                * DDM   ***** Preserved *****

 146            KK    N11P   BASIN
 147            KM   SUB-BASIN N11P
 148            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 149            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
 150            KM     L = 1.01  Kb = .047  Adj. Slope =  298.1
 151            BA    .382
 152            LG    0.02    0.35    2.65    1.21       1
 153            UC   0.246   0.136
 154            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
 155            UA     100
                *
                *
                * *** ROUTE RN11P ***************************************************************
                * ROUTE RN11P IS 3159 FT WITH A SLOPE OF 0.0089
                * CROSS SECTION IS SMALL ROAD WITH HOUSE ON EAST SIDE
                * ALONG LOCAL STREETS
                * ROUTE FLOWS FROM CALLE LEJOS (N11P) TO PINNACLE PEAK RD (CN11L)
                * DDM   ***** Preserved *****
1                                   HEC-1 INPUT                                                    PAGE  7

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 156            KK   RN11P
 157            RS       6    FLOW       0
 158            RC    0.05     .04     .05    3159   .0089
 159            RX       0     500     525     526     541     542     592     593
```

```
160          RY    4.75    1.25    0.25       0       0    0.25    1.25    9.25
             *
             *
             * *** BASIN N11L ***********************************************************
             * DDM   ***** Preserved *****

161          KK    N11L   BASIN
162          KM   SUB-BASIN N11L
163          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
164          KM   THIS BASIN USED A RAINFALL REDUCTION FACTOR OF  .996
165          KM     L = 2.27  Kb = .048  Adj. Slope =   12.0
166          BA    .293
167          LG   0.01    0.33    2.65    1.28       3
168          UC  0.479   0.231
169          UA      0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
170          UA    100
             *
             *
             * *** COMBINE  CN11L ********************************************************
             * COMBINE BASINS N11L,RN11P
             * DDM   ***** Preserved *****

171          KK   CN11L
172          HC       2
             *
             *
             * *** DIVERSION DN11L *******************************************************
             * DIVERSION 87TH AVE. AND PINNACLE PEAK RD.  DIVERTED FLOW SOUTH ALONG 87TH AVE.
             * MAIN FLOW EAST ALONG PINNACLE PEAK TO 83RD AVE.
             * DDM   ***** Preserved *****

173          KK   DN11L
174          DT   N11LI
175          DI       0       1      20     150     300     500
176          DQ       0     .75      15     120     270     470
             *
             *
             * *** ROUTE RN11LE **********************************************************
             * ROUTE RN11LE IS 2673 FT WITH A SLOPE OF 0.0015
             * CROSS SECTION IS A SMALL DITCH WITH HOMES ON THE SOUTH SIDE
             * EAST ALONG PINNACLE PEAK RD.
             * ROUTE FLOW FROM 87TH AVE. (CN11L) TO 83RD AVE. (CN21I)
             * DDM   ***** Preserved *****

177          KK  RN11LE
178          RS      23    FLOW       0
179          RC    0.05    0.04     .05    2673  0.0015
180          RX       0     500     525     550     575     600     700     701
181          RY       5       3       2       2       0       2       3      11
             *
             *
             * *** COMBINE  CN21I ********************************************************
             * COMBINE RN11LE, RN21ZW, (BASIN N21I, AND RN21KS)
             * INTERSECTION OF PINNACLE PEAK RD. AND 83RD AVE.
             * DDM   ***** Preserved *****
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

182          KK   CN21I
183          HC       3   0.845
             *
             *
             * *** ROUTE RN21I ***********************************************************
             * ROUTE RN21I IS 2703 FT WITH A SLOPE OF 0.0063
             * CROSS SECTION IS MEDIUM ROAD WITH HOMES ON BOTH SIDES
             * ALONG 83RD AVE. ROADWAY
             * ROUTE FLOW PINNACLE PEAK RD. (CN11I) TO WILLIAMS(CN21F)
             * DDM   ***** Preserved *****

184          KK   RN21I
185          RS       9    FLOW       0
186          RC    0.05     .06     .05    2703   .0063
187          RX       0      25      50      51      81      82     107     132
```

```
188          RY       9       1    0.25       0       0    0.25       1       9
             *
             *
             * *** BASIN N22B ***********************************************************
             * DDM   ***** Preserved *****

189          KK    N22B   BASIN
190          KM   SUB-BASIN N22B
191          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
192          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
193          KM     L =  .53  Kb = .052  Adj. Slope =   34.0
194          BA    .185
195          LG    0.30    0.17    7.00    0.12       5
196          UC   0.342   0.177
197          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
198          UA     100
             *
             *
             * *** DIVERSION DN22B ******************************************************
             * MAIN TO 83RD AVE & SPLIT SOUTH TO DEER VALLEY RD
             * DDM   ***** Preserved *****

199          KK   DN22B
200          DT   N22BI
201          DI       0       1      10     100     200     300     400
202          DQ       0      .9       9      90     180     270     360
             *
             *
             * *** ROUTE RN22BE *********************************************************
             * ROUTE RN22BE IS 1403 FT WITH A SLOPE OF 0.0007
             * CROSS SECTION IS A SMALL ROAD WITH A FENCE ON THE EAST SIDE
             * FLOW ALONG WILLIAMS RD.
             * ROUTE FLOW FROM 85TH AVE. (CN21F) TO 83RD AVE. (CN22B)
             * DDM   ***** Preserved *****
1                                        HEC-1 INPUT                                    PAGE  9

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

203          KK  RN22BE
204          RS       1    FLOW       0
205          RC    0.05    0.04    0.05    1403   .0007
206          RX       0     500     525     526     556     557     567     568
207          RY    4.25    1.25    0.25       0       0    0.25    1.25    9.25
             *
             *
             * *** BASIN N21F ***********************************************************
             * DDM   ***** Preserved *****

208          KK    N21F   BASIN
209          KM   SUB-BASIN N21F
210          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
211          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
212          KM     L =  .34  Kb = .055  Adj. Slope =   15.0
213          BA    .104
214          LG    0.30    0.10   11.20    0.03      15
215          UC   0.554   0.507
216          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
217          UA     100
             *
             *
             * *** COMBINE  CN21F *******************************************************
             * COMBINE N22B, CN21I,N21F
             * INTERSECTION OF 83RD AVE. AND WILLIAMS RD.
             * DDM   ***** Preserved *****

218          KK   CN21F
219          HC       3    1.05
             *
             *
             * *** ROUTE RN21F ***********************************************************
             * ROUTE RN21F IS 1522 FT WITH A SLOPE OF 0.0039
             * CROSS SECTION IS A MEDIUM ROAD (MEASURED)
             * ALONG 83RD AVE.
             * ROUTE FLOW FROM WILLIAMS RD. (CN11F) TO HILLCREST BLVD. (CN21E)
```

```
* DDM   ***** Preserved *****

KK   RN21F
RS       3    FLOW       0
RC    0.05    0.04    0.05    1522  0.0039
RX       0       1      91     161     196     246     276     277
RY      10       4       3       3       0       0       3      10
*
*
* *** BASIN N21G ************************************************************
* DDM   ***** Preserved *****

KK    N21G   BASIN
KM   SUB-BASIN N21G
KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
KM     L =  .51  Kb = .058  Adj. Slope =   27.0
BA    .063
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

LG    0.30    0.11   11.20    0.03      14
UC   0.383   0.360
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*
*
* *** DIVERSION RECOVER DR21Z*  ***********************************************
* RECOVERS FLOWS FROM THE NORTH (CN21Z)

KK  DR21Z*
DR  N21ZI*
*
*
* *** ROUTE RN21ZS ***********************************************************
* ROUTE RN21ZS IS 2677 FT WITH A SLOPE OF 0.0052
* CROSS SECTION IS A ROAD WITH HOMES ON THE RIGHT SIDE
* ROUTE FLOW FROM PINNACLE PEAK RD. (CN11Z) TO WILLIAMS RD (CN21G)
* DDM   ***** Preserved *****

KK  RN21ZS
RS      14    FLOW       0
RC    0.05     .06     .05    2677   .0052
RX       0     500     525     526     561     562     587     588
RY       5       2       1    0.75    0.75       1       2      10
*
* *** COMBINE  CN21G *********************************************************
* COMBINE  RN21ZS, N21G
* INTERSECTION OF 81ST AVE. AND PINNACLE PEAK
* DDM   ***** Preserved *****

KK   CN21G
HC       2
*
*
* *** DIVERSION DN21G ********************************************************
* MAIN SOUTHWEST TO 83RD AVE SPLIT EAST TO NEW RIVER ALONG WILLIAMS
* DDM   ***** Preserved *****

KK  DN21GO
DT   N21GI
DI       0       1      50      90     300     400     500
DQ       0      .1      .2       1     210     310     410
*
*
* *** ROUTE RN21GS ***********************************************************
* ROUTE RN21GS IS 2795 FT WITH A SLOPE OF 0.0064
* CROSS SECTION IS A MEDIUM ROAD (MEASURED)
* ALONG CHANNEL ON WILLIAMS DR AND CHANNEL ON 83RD AVE.
* ROUTE FLOW FROM 81ST & WILLIAMS (CN21G) TO VIA MONTOYA & 83RD AVE(CN21E)
* DDM   ***** Preserved *****
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
248          KK  RN21GS
249          RS       9    FLOW       0
250          RC    0.05    0.04    0.05    2795   .0064
251          RX       0       1      91     106     136     158     182     183
252          RY      10       3       3       2       0       0    1.25      10
             *
             *
             * *** BASIN N21E ***************************************************************
             * DDM   ***** Preserved *****

253          KK    N21E   BASIN
254          KM   SUB-BASIN N21E
255          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
256          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
257          KM     L =  .29  Kb = .057  Adj. Slope =    7.0
258          BA    .063
259          LG    0.25    0.10   11.20    0.03      28
260          UC   0.550   0.546
261          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
262          UA     100
             *
             *
             * *** COMBINE  CN21E ************************************************************
             * COMBINE BASIN N21E, RN21GS, AND RN21F
             * INTERSECTION OF 83RD AVE AND VIA MONTOYA
             * DDM   ***** Preserved *****

263          KK   CN21E
264          HC       3
             *
             *
             * *** ROUTE RN21E ***************************************************************
             * ROUTE RN21E IS 1379 FT WITH A SLOPE OF 0.0051
             * CROSS SECTION IS A SMALL ROAD
             * ALONG 83RD AVE. ROADWAY AND Channel
             * ROUTE FLOW TO DEER VALLEY RD (CN21D) FROM VIA MONTOYA (CN21E)
             * DDM   ***** Preserved *****

265          KK   RN21E
266          RS       5    FLOW       0
267          RC    0.05    0.04    0.05    1379  0.0051
268          RX       0     500     525     526     546     547     572    1072
269          RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
             *
             *
             * *** BASIN N21D ***************************************************************
             * DDM   ***** Preserved *****

270          KK    N21D   BASIN
271          KM   SUB-BASIN N21D
272          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
273          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
274          KM     L =  .26  Kb = .030  Adj. Slope =   31.0
275          BA    .053
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

276          LG    0.10    0.25    9.70    0.04      10
277          UC   0.213   0.153
278          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
279          UA     100
             *
             *
             * *** STORAGE ROUTING LN21D ****************************************
             * *** FLETCHER HEIGHTS RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ********
             * DDM   ***** Preserved *****

280          KK   LN21D
281          DT  LN21DD     4.0
282          DI       0     100    1000   10000
283          DQ       0     100    1000   10000
             *
             *
```

```
* *** DIVERSION RECOVER  DRN22BI  ********************************************
* RECOVERS FLOWS FROM THE NORTH DN22B (WILLIAMS AND 85th AVE.)
* DDM   ***** Preserved *****

KK  N22BIX
DR   N22BI
*
*
* *** ROUTE RN22BS  ************************************************************
* ROUTE RN22BS IS 2633 FT WITH A SLOPE OF 0.0049
* CROSS SECTION IS A MEDIUM ROAD WITH HOMES ON BOTH SIDES
* SOUTH ALONG 85th AVE.
* ROUTE FLOW WILLIAMS RD (CN22B) TO Deer Valley RD.(CN22A)
* DDM   ***** Preserved *****

KK  RN22BS
RS       8    FLOW       0
RC    0.05    0.04    0.05    2633  0.0049
RX       0      15      30      31      71      72     101     102
RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
*
*
* *** BASIN N22A ***************************************************************
* DDM   ***** Preserved *****

KK    N22A   BASIN
KM   SUB-BASIN N22A
KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
KM     L =  .69  Kb = .043  Adj. Slope =   22.0
BA    .179
LG    0.21    0.15   10.10    0.04      26
UC   0.446   0.299
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*
*
* *** COMBINE  CN22A ***********************************************************
* COMBINE  RN22BS, N22A
* INTERSECTION OF 85TH AVE. AND DEER VALLEY RD.
* DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK   CN22A
HC       2    0.37
*
*
* *** DIVERSION DN22A ***********************************************************
* MAIN TO 83RD CHANNEL & SPLIT TO THE WEST ALONG DEER VALLEY RD.
*
* 15% OF THE BASIN FLOWS TO THE EAST AND INTO THE 83RD AVE SYSTEM
*
* DDM   ***** Preserved *****

KK   DN22A
DT   N22AI
DI       0       1     100     200     300     400    1000
DQ       0     .15      15      30      45      60     150
*
*
* *** ROUTE RN22AE   ************************************************************
* ROUTE RN22AE IS 1322 FT WITH A SLOPE OF 0.0015
* CROSS SECTION IS A SMALL ROAD, OPEN ON BOTH SIDES
* EAST ALONG DEER VALLEY RD.
* ROUTE FLOW FROM 85TH AVE (CN22A) TO 83RD AVE. (CN21D)
* DDM   ***** Preserved *****

KK  RN22AE
RS       9    FLOW       0
RC    0.05    0.04    0.05    1322  0.0015
RX       0     500     525     526     561     562     587    1087
RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
```

```
                *
                *
                * *** COMBINE  CN21D ***********************************************************
                * COMBINE RN21E, RN22AE AND BASIN N21D
                * INTERSECTION OF DEER VALLEY RD AND 83RD AVE.
                * DDM   ***** Preserved *****

 312            KK   CN21D
 313            HC       3
                *
                *
                * *** DIVERSION DN21D ***********************************************************
                * MAIN ALONG 83RD AVENUE SPLIT EAST
                * DDM   ***** Preserved *****

 314            KK   DN21D
 315            DT   N21DI
 316            DI       0       1      10      50     100     150     200
 317            DQ       0      .1     1.5     7.5      15    22.5      30
                *
                *
                * *** ROUTE RN21DS **************************************************************
                * ROUTE RN21DS IS 7844 FT WITH A SLOPE OF 0.0046
                * CROSS SECTION IS A DITCH ON WEST SIDE WITH TWO WALLS
                * SOUTH ALONG 83RD AVE. ROADWAY AND CHANNEL
                * ROUTE FLOW TO BEARDSLEY THEN NEW RIVER(CN21C) FROM DEER VALLEY(CN21D)
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE 14

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 318            KK  RN21DS
 319            RS      15    FLOW       0
 320            RC    0.05    0.04    0.05    7844  0.0046
 321            RX       0       1     121     151     186     211     236     237
 322            RY      13       5       3       0       0       3       4      13
                *
                *
                * *** BASIN N21C ***************************************************************
                * DDM   ***** Preserved *****

 323            KK    N21C   BASIN
 324            KM   SUB-BASIN N21C
 325            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 326            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
 327            KM     L = 1.16  Kb = .040  Adj. Slope =   24.0
 328            BA    .393
 329            LG   0.20    0.20    8.00    0.09      21
 330            UC  0.692   0.535
 331            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 332            UA     100
                *
                *
                * *** STORAGE ROUTING LN21C *****************************************
                * *** FLETCHER HEIGHTS RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ********
                * DDM   ***** Preserved *****

 333            KK   LN21C
 334            DT  LN21CD     2.6
 335            DI       0     100    1000   10000
 336            DQ       0     100    1000   10000
                *
                *
                * *** COMBINE  CN21C ************************************************************
                * COMBINE RN21DS AND BASIN N21C
                * NEAR BEARDSLEY RD. AND NEW RIVER (END OF 83RD AVE. CHANNEL)
                * DDM   ***** Preserved *****

 337            KK   CN21C
 338            HC       2
                *
                *
                * *** ROUTE RN21C ***************************************************************
                * ROUTE RN21C IS 170 FT WITH A SLOPE OF 0.0235
```

```
            * CROSS SECTION IS THE DITCH THROUGH FLETCHER HEIGHTS (MEASURED)
            * TO THE NEW RIVER CHANNEL
            * ROUTE FLOW TO THE NEW RIVER(CN21) FROM FLETCHER HEIGHTS(CN21C)
            * DDM   ***** Preserved *****

 339        KK   RN21C
 340        RD
 341        RC    0.05    0.05    0.05     170  0.0235
 342        RX       0     250     500     508     528     536     636    1023
 343        RY       7       6       5       0       0       5       6       7
            *
            *
            * ***********************************************************************
            * **********************      ROCK SPRINGS CREEK      **************************
            * ***********************************************************************
            *
            * *** BASIN N24Q ***************************************************************
            * DDM   ***** Preserved *****
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 344        KK    N24Q   BASIN
 345        KM   SUB-BASIN N24Q
 346        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 347        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
 348        KM     L =  .39  Kb = .061  Adj. Slope =  315.0
 349        BA    .037
 350        LG    0.35    0.38    6.40    0.16       4
 351        UC   0.150   0.139
 352        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
 353        UA     100
            *
            *
            * *** ROUTE RN24Q *************************************************************
            * ROUTE RN24Q IS 1688 FT WITH A SLOPE OF 0.0142
            * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
            * SOUTH ALONG NATURAL WASH
            * ROUTE FLOW TO ROCK SPRINGS CREEK CN24O
            * DDM   ***** Preserved *****

 354        KK   RN24Q
 355        RS      15    FLOW       0
 356        RC    0.05    0.06    0.05    1688   .0142
 357        RX       0     400     800    1200    1600    2000    2400    2800
 358        RY       3       1      .5       0       0      .5       1       3
            *
            *
            * *** BASIN N24R ***************************************************************
            * DDM   ***** Preserved *****

 359        KK    N24R   BASIN
 360        KM   SUB-BASIN N24R
 361        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 362        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
 363        KM     L =  .38  Kb = .062  Adj. Slope =  315.0
 364        BA    .033
 365        LG    0.35    0.25    9.70    0.05       2
 366        UC   0.146   0.141
 367        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
 368        UA     100
            *
            *
            * *** ROUTE RN24R *************************************************************
            * ROUTE RN24R IS 1587 FT WITH A SLOPE OF 0.0183
            * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
            * SOUTH ALONG NATURAL WASH
            * ROUTE FLOW TO ROCK SPRINGS CREEK (RN24O)
            * DDM   ***** Preserved *****

 369        KK   RN24R
 370        RS      13    FLOW       0
 371        RC    0.05    0.05    0.05    1587  0.0183
 372        RX       0     400     800    1200    1600    2000    2400    2800
```

```
373          RY       3       1      .5       0       0      .5       1       3
             *
             *
             * *** BASIN N24O ***************************************************************
             * DDM    ***** Preserved *****
                                          HEC-1 INPUT                                          PAGE 16

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


374          KK    N24O   BASIN
375          KM   SUB-BASIN N24O
376          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
377          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
378          KM     L =  .47  Kb = .053  Adj. Slope =   53.0
379          BA    .155
380          LG    0.35    0.35    4.80    0.30       6
381          UC   0.275   0.140
382          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
383          UA     100
             *
             *
             * *** COMBINE  CN24O ***************************************************************
             * COMBINE BASINS N24O, RN24Q, RN24R, @ ROCK SPRINGS CREEK
             * At THE ROCK SPRINGS CREEK UPPER REACH
             * DDM    ***** Preserved *****

384          KK   CN24O
385          HC       3
             *
             *
             * *** ROUTE  RN24O ***************************************************************
             * ROUTE RN24O IS 1635 FT WITH A SLOPE OF 0.0073
             * CROSS SECTION IS A SMALL NATURAL WASH
             * EAST ALONG ROCK SPRINGS CREEK
             * ROUTE FLOW ON ROCK SPRINGS CREEK FROM CN24O TO CN24P
             * DDM    ***** Preserved *****

386          KK   RN24O
387          RS       4    FLOW       0
388          RC    0.05     .06     .05    1635   .0073
389          RX       0     350     450     480     482     510     610     910
390          RY       7       6       5       1       0       5       6       7
             *
             *
             * *** BASIN N24S ***************************************************************
             * DDM    ***** Preserved *****

391          KK    N24S   BASIN
392          KM   SUB-BASIN N24S
393          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
394          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
395          KM     L =  .36  Kb = .060  Adj. Slope =  315.0
396          BA    .048
397          LG    0.35    0.30    8.00    0.08       3
398          UC   0.142   0.106
399          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
400          UA     100
             *
             *
             * *** ROUTE RN24S ***************************************************************
             * ROUTE RN24S IS 2530 FT WITH A SLOPE OF 0.0170
             * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
             * SOUTHEAST ALONG NATURAL WASH
             * ROUTE FLOW TO CN24P
             * DDM    ***** Preserved *****
                                          HEC-1 INPUT                                          PAGE 17

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


401          KK   RN24S
402          RS      16    FLOW       0
403          RC    0.05     .06     .05    2530   .0170
404          RX       0     400     800    1200    1600    2000    2400    2800
```

```
405         RY       3       1      .5       0       0      .5       1       3
            *
            *
            * *** BASIN N24T ***************************************************************
            * DDM   ***** Preserved *****

406         KK    N24T   BASIN
407         KM   SUB-BASIN N24T
408         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
409         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
410         KM     L =  .24  Kb = .066  Adj. Slope =  315.0
411         BA    .017
412         LG    0.35    0.33    7.30    0.11       0
413         UC   0.121   0.116
414         UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
415         UA     100
            *
            *
            * *** ROUTE RN24T **************************************************************
            * ROUTE RN24T IS 1972 FT WITH A SLOPE OF 0.0198
            * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
            * SOUTH ALONG NATURAL WASH
            * ROUTE FLOW TO ROCK SPRINGS CREEK (CN24P)
            * DDM   ***** Preserved *****

416         KK   RN24T
417         RS      23    FLOW       0
418         RC    0.05     .06     .05    1972   .0198
419         RX       0     400     800    1200    1600    2000    2400    2800
420         RY       3       1      .5       0       0      .5       1       3
            *
            *
            * *** BASIN N24P ***************************************************************
            * DDM   ***** Preserved *****

421         KK    N24P   BASIN
422         KM   SUB-BASIN N24P
423         KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
424         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
425         KM     L =  .50  Kb = .054  Adj. Slope =   82.0
426         BA    .122
427         LG    0.35    0.37    5.20    0.25       5
428         UC   0.246   0.149
429         UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
430         UA     100
            *
            *
            * *** COMBINE  CN24P ***********************************************************
            * COMBINE BASINS N24P,RN24T,RN24O AND   RN24S
            * UPPER REACH OF ROCK SPRINGS CREEK
            * DDM   ***** Preserved *****
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

431         KK   CN24P
432         HC       4
            *
            *
            * *** ROUTE  RN24P **************************************************************
            * ROUTE RN24P IS 650 FT WITH A SLOPE OF 0.0646
            * CROSS SECTION IS A SMALL NATURAL WASH
            * EAST ALONG ROCK SPRINGS CREEK
            * ROUTE FLOW FROM CN24P TO CN24U*
            * DDM   ***** Preserved *****

433         KK   RN24P
434         RS       1    FLOW       0
435         RC    0.05     .06     .05     650   .0646
436         RX       0     350     450     480     482     510     610     910
437         RY       7       6       5       1       0       5       6       7
            *
            *
            * *** BASIN N24U ***************************************************************
```

```
* DDM   ***** Preserved *****

KK    N24U   BASIN
KM   SUB-BASIN N24U
KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
KM     L =  .49  Kb = .054  Adj. Slope =  315.0
BA    .113
LG    0.35    0.39    6.20    0.17       7
UC   0.158   0.093
UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
UA     100
*
*
* *** ROUTE RN24U ************************************************************
* ROUTE RN24U IS 1304 FT WITH A SLOPE OF 0.0199
* CROSS SECTION IS SHALLOW CONCENTRATED FLOW
* SOUTH ALONG NATURAL WASHES
* ROUTE FLOW TO ROCK SPRINGS CREEK(CN24U*)
* DDM   ***** Preserved *****

KK   RN24U
RS       8    FLOW       0
RC    0.05     .06     .05    1304   .0199
RX       0     400     800    1200    1600    2000    2400    2800
RY       3       1      .5       0       0      .5       1       3
*
*
* *** COMBINE CN24U*  ********************************************************
* COMBINE RN24U AND RN24P
* ROCK SPRINGS CREEK
* DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  CN24U*
HC       2
*
*
* *** ROUTE RN24U*  **********************************************************
* ROUTE RN24U* IS 1056 FT WITH A SLOPE OF 0.0038
* CROSS SECTION IS A SMALL NATURAL WASH
* ALONG ROCK SPRINGS CREEK
* ROUTE FLOW CN24U* TO CN24V*
* DDM   ***** Preserved *****

KK  RN24U*
RS       3    FLOW       0
RC    0.05     .06     .05    1056   .0038
RX       0     100     300     360     380     420     620     720
RY      10       8       6       2       0       6       8      10
*
*
* *** BASIN N24V *************************************************************
* DDM   ***** Preserved *****

KK    N24V   BASIN
KM   SUB-BASIN N24V
KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
KM     L =  .40  Kb = .060  Adj. Slope =  312.2
BA    .046
LG    0.35    0.35    4.10    0.46      12
UC   0.154   0.129
UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
UA     100
*
*
* *** ROUTE RN24V ************************************************************
* ROUTE RN24V IS 1649 FT WITH A SLOPE OF 0.0121
* CROSS SECTION IS SHALLOW CONCENTRATED FLOW
* SOUTH ALONG NATURAL Washes
* ROUTE FLOW TO ROCK SPRINGS CREEK (CN24V*)
```

```
* DDM   ***** Preserved *****

KK   RN24V
RS      13    FLOW       0
RC    0.05     .06     .05    1649   .0121
RX       0     400     800    1200    1600    2000    2400    2800
RY       3       1      .5       0       0      .5       1       3
*
*
* *** COMBINE CN24V*   ********************************************************
* COMBINE BASINS RN24V AND RN24U*
* AT ROCK SPRINGS CREEK
* DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  CN24V*
HC       2
*
*
* *** ROUTE RN24V*  ************************************************************
* ROUTE RN24V* IS 1292 FT WITH A SLOPE OF 0.0046
* CROSS SECTION IS A MEDIUM NATURAL WASH
* SOUTHEAST ALONG ROCK SPRINGS CREEK
* ROUTE FLOW TO CN24M
* DDM   ***** Preserved *****

KK  RN24V*
RS       3    FLOW       0
RC    0.05     .06     .05    1292   .0046
RX       0     100     300     360     380     420     620     720
RY      10       8       6       2       0       6       8      10
*
*
* *** BASIN N24M ***************************************************************
* DDM   ***** Preserved *****

KK    N24M   BASIN
KM   SUB-BASIN N24M
KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
KM     L =  .85  Kb = .050  Adj. Slope =   56.0
BA    .246
LG    0.35    0.36    5.10    0.26       1
UC   0.346   0.203
UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
UA     100
*
*
* *** COMBINE  CN24M ***********************************************************
* COMBINE BASINS N24M AND RN24B*
* At ROCK SPRINGS CREEK
* DDM   ***** Preserved *****

KK   CN24M
HC       2
*
*
* *** ROUTE RN24M ***************************************************************
* ROUTE RN24M IS 1013 FT WITH A SLOPE OF 0.0059
* CROSS SECTION IS A MEDIUM NATURAL WASH
* ALONG ROCK SPRINGS CREEK
* *** ROUTE FLOW FROM CN24M TO CN24I*  ****************************************
* DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK   RN24M
RS       2    FLOW       0
RC     .05     .06     .05    1013   .0059
RX       0     100     300     360     380     420     620     720
```

```
498          RY      10       8       6       2       0       6       8      10
             *
             *
             * *** BASIN N24L ***************************************************************
             * DDM   ***** Preserved *****

499          KK    N24L   BASIN
500          KM   SUB-BASIN N24L
501          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
502          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
503          KM     L =  .84  Kb = .047  Adj. Slope =  302.5
504          BA    .381
505          LG    0.35    0.35    4.90    0.29      12
506          UC   0.196   0.091
507          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
508          UA     100
             *
             *
             * *** ROUTE RN24L ***************************************************************
             * ROUTE RN24L IS 1704 FT WITH A SLOPE OF 0.0117
             * CROSS SECTION IS A SMALL NATURAL WASH
             * ALONG NATURAL WASH
             * ROUTE FLOW TO ROCK SPRINGS CREEK FROM BASIN N24L
             * DDM   ***** Preserved *****

509          KK   RN24L
510          RS       3    FLOW       0
511          RC     .05     .06     .05    1704   .0117
512          RX       0     350     450     480     482     510     610     910
513          RY       7       6       5       1       0       5       6       7
             *
             *
             * *** COMBINE CN24I*  ***********************************************************
             * COMBINE RN24L AND RN24M
             * At ROCK SPRINGS CREEK
             * DDM   ***** Preserved *****

514          KK  CN24I*
515          HC       2
             *
             *
             * *** ROUTE RN24I*  *************************************************************
             * ROUTE RN24I* IS 4645 FT WITH A SLOPE OF 0.0047
             * CROSS SECTION IS A MEDIUM NATURAL WASH
             * ALONG ROCK SPRINGS CREEK
             * ROUTE FLOW FROM CN24I* TO CN24I
             * DDM   ***** Preserved *****
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

516          KK  RN24I*
517          RS      14    FLOW       0
518          RC    0.05     .06     .05    4645   .0047
519          RX       0     100     300     360     380     420     620     720
520          RY      10       8       6       2       0       6       8      10
             *
             *
             * *** BASIN N24I ****************************************************************
             * DDM   ***** Preserved *****

521          KK    N24I   BASIN
522          KM   SUB-BASIN N24I
523          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
524          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
525          KM     L = 1.25  Kb = .049  Adj. Slope =   32.0
526          BA    .300
527          LG    0.35    0.35    4.15    0.44       0
528          UC   0.733   0.622
529          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
530          UA     100
             *
             *
             * *** BASIN N24H ****************************************************************
```

```
* DDM   ***** Preserved *****

KK    N24H   BASIN
KM   SUB-BASIN N24H
KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
KM     L = 1.26  Kb = .049  Adj. Slope =  275.0
BA    .286
LG    0.35    0.35    4.15    0.44      35
UC   0.254   0.198
UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
UA     100
*
*
* *** BASIN N24N ***************************************************************
* DDM   ***** Preserved *****

KK    N24N   BASIN
KM   SUB-BASIN N24N
KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
KM     L = 1.73  Kb = .054  Adj. Slope =   51.0
BA    .130
LG    0.35    0.35    4.15    0.44       6
UC   0.317   0.285
UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
UA     100
*
*
* *** ROUTE RN24N **************************************************************
* ROUTE RN24N IS 4720 FT WITH A SLOPE OF 0.0064
* CROSS SECTION IS A MEDIUM NATURAL WASH
* ALONG NATURAL WASH
* ROUTE FLOW TO CN24J FROM CN24N
* DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK   RN24N
RS       3    FLOW       0
RC    0.05     .06     .05    4720   .0064
RX       0     100     300     360     380     420     620     720
RY      10       8       6       2       0       6       8      10
*
*
* *** BASIN N24J ***************************************************************
* DDM   ***** Preserved *****

KK    N24J   BASIN
KM   SUB-BASIN N24J
KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
KM     L =  .89  Kb = .054  Adj. Slope =   31.0
BA    .121
LG    0.35    0.35    3.95    0.48       0
UC   0.617   0.657
UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
UA     100
*
*
* *** COMBINE  CN24J ***********************************************************
* COMBINE BASINS N24J AND RN24N
* Near Happy Valley RD. AND ROCK SPRINGS CREEK
* DDM   ***** Preserved *****

KK   CN24J
HC       2
*
*
* *** ROUTE RN24J **************************************************************
* ROUTE RN24J IS 688 FT WITH A SLOPE OF 0.0058
* CROSS SECTION IS A MEDIUM NATURAL WASH
* ALONG NATURAL WASH
```

```
                * ROUTE FLOW TO CN24I FROM CN24J
                * DDM   ***** Preserved *****

568             KK   RN24J
569             RS       3    FLOW       0
570             RC    0.05     .06     .05     688   .0058
571             RX       0     100     300     360     380     420     620     720
572             RY      10       8       6       2       0       6       8      10
                *
                *
                * *** BASIN N24K ***********************************************************
                * DDM   ***** Preserved *****

573             KK    N24K   BASIN
574             KM   SUB-BASIN N24K
575             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
576             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
577             KM     L = 1.33  Kb = .051  Adj. Slope =   30.0
578             BA    .212
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

579             LG    0.35    0.35    4.20    0.43       0
580             UC   0.821   0.904
581             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
582             UA     100
                *
                *
                * *** COMBINE  CN24I ******************************************************
                * COMBINE BASINS N24H, N24K AND RN24J, RN24I*
                * ROCK SPRINGS CREEK AT HAPPY VALLEY RD. ALIGNMENT
                * DDM   ***** Preserved *****

583             KK   CN24I
584             KO                                      21
585             HC       5
                *
                *
                * *** ROUTE RN24I ***********************************************************
                * ROUTE RN24I IS 2747 FT WITH A SLOPE OF 0.006
                * CROSS SECTION IS ROCK SPRINGS CREEK (MEASURED)
                * ALONG ROCK SPRINGS CREEK
                * ROUTE FLOW TO CN24G* FROM CN24I
                * DDM   ***** Preserved *****

586             KK   RN24I
587             KO       3                              21
588             RS      16    FLOW       0
589             RC    0.05     .06     .05    2747   0.006
590             RX       0     480     500     518     544     609     900    1121
591             RY      11      10       0     0.2      10      11      12      13
                *
                *
                * *** DIVERSION RECOVER DRN21J  *********************************************
                * RECOVER DIVERTED FLOW FROM N21J (CALLE LEJOS)
                * NO AREA FROM THE DIVERTED FLOW WAS INCLUDED AT THIS LOCATION
                * DDM   ***** Preserved *****

592             KK  DRN21J
593             DR   N21JI
                *
                *
                * *** ROUTE RN21JE ******************************************************
                * ROUTE RN21JE IS 1741 FT WITH A SLOPE OF 0.0029
                * CROSS SECTION IS A DIRT ROAD
                * ALONG CALLES LEJOS
                * ROUTE DIVERTED FLOW FROM 83RD AVE. (CN21J) TO ROCK SPRINGS CREEK (CN24G*)
                * DDM   ***** Preserved *****

594             KK  RN21JE
595             RS      16    FLOW       0
596             RC    0.05     .06     .05    1741  0.0029
597             RX       0     500     525     526     556     557     572    1072
598             RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
```

```
*
*
* *** COMBINE  CN24G* ***************************************************
* COMBINE DIVERTED FLOW FROM RN21JE AND RN24I
* AT ROCK SPRINGS CREEK AND THE ALIGNMENT OF CALLES LEJOS
* DDM   ***** Preserved *****
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 599        KK  CN24G*
 600        HC       2    2.71
            *
            *
            * *** ROUTE RN24G*   ***************************************************
            * ROUTE RN24G* IS 2913 FT WITH A SLOPE OF 0.0053
            * CROSS SECTION IS ROCK SPRINGS CREEK (MEASURED)
            * ALONG ROCK SPRINGS CREEK
            * ROUTE DIVERTED FLOW TO CN24G FROM CN21G*
            * DDM   ***** Preserved *****

 601        KK  RN24G*
 602        RS       8    FLOW       0
 603        RC    0.05     .06     .05    2913  0.0053
 604        RX       0     480     500     518     544     609     900    1121
 605        RY      11      10       0       0      10      11      12      13
            *
            *
            * *** BASIN N24G ***************************************************************
            * DDM   ***** Preserved *****

 606        KK    N24G   BASIN
 607        KM   SUB-BASIN N24G
 608        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 609        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .994
 610        KM     L = 1.19  Kb = .046  Adj. Slope =   34.0
 611        BA    .440
 612        LG    0.34    0.33    4.25    0.42       1
 613        UC   0.663   0.430
 614        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
 615        UA     100
            *
            *
            * *** STORAGE ROUTING LN24G ***********************************************
            * *** CLEARVIEW ESTATES RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
            * DDM   ***** Preserved *****

 616        KK   LN24G
 617        DT  LN24GD     0.7
 618        DI       0     100    1000   10000
 619        DQ       0     100    1000   10000
            *
            *
            * *** COMBINE  CN24G ***************************************************************
            * COMBINE DIVERTED FLOW FROM RN24G*, AND BASIN N24G
            * ROCK SPRINGS CREEK @ PINNACLE PEAK RD Alignment (FLOW IN THE CREEK)

 620        KK   CN24G
 621        HC       2
            *
            *
            * *** DIVERSION RECOVER DRN21Z  ************************************************
            * RECOVER DIVERTED FLOW FROM N21Z (PINNACLE PEAK & 81ST AVE.)
            * THE AREA FROM CN21N WAS ADDED TO GET THE CORRECT AREA REDUCTION
            * DDM   ***** Preserved *****
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 622        KK  DRN21Z
 623        DR   N21ZI
            *
            *
```

```
            * *** ROUTE RN21ZE ************************************************************
            * ROUTE RN21ZE IS 2413 FT WITH A SLOPE OF 0.0025
            * CROSS SECTION IS A ROAD WITH A DITCH ON RIGHT
            * ROUTE DIVERTED FLOW FROM 81ST AVE (CN21Z) TO ROCK SPRINGS CREEK (CN24G)
            * DDM   ***** Preserved *****

 624        KK  RN21ZE
 625        RS       1    FLOW       0
 626        RC    0.05     .06     .05    2413   .0025
 627        RX       0     500     525     555     570     585     610     910
 628        RY       5       3       2       2       0       2       3       5
            *
            *
            * *** COMBINE  CN24G+ ******************************************************
            * COMBINE DIVERTED FLOW FROM RN21ZE, (RN24G*, AND BASIN N21G)
            * ADD DIVERTED FLOW FROM 81ST AVE. TO ROCK SPRINGS CREEK (PINNACLE PEAK)
            * AREA OF CN21Z (0.35) WAS TO N24G (2.69) TOTAL AREA 3.04
            * DDM   ***** Preserved *****

 629        KK  CN24G+
 630        HC       2
            *
            *
            * *** ROUTE RN24G ***********************************************************
            * ROUTE RN24G IS 1400 FT WITH A SLOPE OF 0.01
            * CROSS SECTION IS ROCK SPRINGS CREEK (MEASURED)
            * ALONG ROCK SPRINGS CREEK
            * ROUTE DIVERTED FLOW FROM PINNACLE PEAK (CN24G) TO Patrick lane (CN24F)
            * DDM   ***** Preserved *****

 631        KK   RN24G
 632        RS       2    FLOW       0
 633        RC    0.05     .06     .05    1400    0.01
 634        RX       0     256     372     397     407     419     464     800
 635        RY      12      10       8       0       0       6       8      12
            *
            *
            *
            *
            *
            * *** BASIN N24F ************************************************************
            * DDM   ***** Preserved *****

 636        KK    N24F   BASIN
 637        KM   SUB-BASIN N24F
 638        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 639        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
 640        KM     L =  .49  Kb = .055  Adj. Slope =   33.0
 641        BA    .106
 642        LG    0.35    0.36    5.00    0.28       0
1                                        HEC-1 INPUT                                    PAGE 27

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 643        UC   0.363   0.244
 644        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
 645        UA     100
            *
            * *** COMBINE  CN24F *******************************************************
            * COMBINE FLOW FROM BASIN N24F AND RN24G
            * At ROCK SPRINGS CREEK AND Patrick lane Alignment
            * DDM   ***** Preserved *****

 646        KK   CN24F
 647        HC       2
            *
            *
            * *** BASIN N24D ************************************************************
            * DDM   ***** Preserved *****

 648        KK    N24D   BASIN
 649        KM   SUB-BASIN N24D
 650        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 651        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
 652        KM     L =  .44  Kb = .042  Adj. Slope =   27.0
```

```
653          BA     .088
654          LG    0.24    0.30    4.25    0.50      29
655          UC   0.308   0.207
656          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
657          UA     100
             *
             *
             * *** COMBINE  CN24D ***********************************************************
             * COMBINE FLOW FROM BASIN N24D, RN24F
             * DDM   ***** Preserved *****

658          KK   CN24D
659          HC       2
             *
             *
             * *** STORAGE LN24D *************************************************************
             * RETENTION at existing sAND AND gravel operation
             * it was assumed that most OF THE FLOW is sTOre at this location
             * sTOrage VOLUME AND stages were assumed TO be large enought TO sTOre all VOLUME
             * DDM   ***** Preserved *****

660          KK   LN24D
661          RS       1    STOR       0
662          SQ       0      10      10      20      30      40      50      60
663          SE    1321    1325    1328  1328.5    1329  1329.5    1330  1330.5
664          SV       0      80     180     200     220     240     260     270
665          SE    1321    1325    1328  1328.5    1329  1329.5    1330  1330.5
             *
             *
             * *** BASIN N21H ****************************************************************
             * DDM   ***** Preserved *****
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

666          KK    N21H   BASIN
667          KM   SUB-BASIN N21H
668          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
669          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
670          KM     L =  .26  Kb = .062  Adj. Slope =   31.0
671          BA     .033
672          LG    0.30    0.25    5.10    0.31      15
673          UC   0.254   0.192
674          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
675          UA     100
             *
             *
             * *** DIVERSION RECOVER DRN21G  ************************************************
             * RECOVER DIVERTED FLOW FROM N21G (WILLIAMS Dr.)
             * no AREA was added for are reduction at this divertion
             * DDM   ***** Preserved *****

676          KK  DRN21G
677          DR   N21GI
             *
             *
             * *** ROUTE RN21GE **************************************************************
             * ROUTE RN21GE IS 1254 FT WITH A SLOPE OF 0.0048
             * CROSS SECTION IS A SMALL ROAD WITH FENCE ON THE RIGHT SIDE
             * ALONG WILLIAMS Dr.
             * ROUTE DIVERTED FLOW FROM 81ST AVE. (CN21G) TO 79th AVE (CN21H)
             * DDM   ***** Preserved *****

678          KK  RN21GE
679          RS      10    FLOW       0
680          RC    0.05     .06     .05    1254   .0048
681          RX       0     500     525     526     541     542     634     635
682          RY    3.75    1.25    0.25       0       0    0.25    1.25    9.25
             *
             *
             * *** COMBINE  CN21H ************************************************************
             * *** COMBINE FLOW FROM RN21GE AND BASIN N21H ***********************************
             * DDM   ***** Preserved *****
```

```
683          KK   CN21H
684          KO                                    21
685          HC       2
             *
             *
             * *** ROUTE RN21H ***************************************************************
             * ROUTE RN21H IS 1812 FT WITH A SLOPE OF 0.0011
             * CROSS SECTION IS THE GRAVEL PIT (MEASURED)
             * ALONG SOUTH boundary OF existing SAND AND gravel operation
             * ROUTE FLOW FROM 87th AVE (CN21H) TO ROCK SPRINGS CREEK (CN24D)
             * DDM   ***** Preserved *****
1                                    HEC-1 INPUT                                          PAGE 29

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


686          KK   RN21H
687          RS      28    FLOW       0
688          RC    0.05     .06     .05    1812  0.0011
689          RX       0     242     292     400     600     809     840    1010
690          RY      11      10       0       0       0       0      10      11
             *
             *
             * *** BASIN N24E ****************************************************************
             * DDM   ***** Preserved *****

691          KK    N24E   BASIN
692          KM   SUB-BASIN N24E
693          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
694          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
695          KM     L =  .31  Kb = .065  Adj. Slope =   19.0
696          BA    .021
697          LG    0.35    0.35    3.95    0.48       0
698          UC   0.392   0.464
699          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
700          UA     100
             *
             *
             * *** ROUTE RN24E ***************************************************************
             * ROUTE RN24E IS 1585 FT WITH A SLOPE OF 0.0076
             * CROSS SECTION IS A MEDIUM NATURAL WASH
             * EAST TO ROCK SPRINGS CREEK AND SOUTH ON ROCK SPRINGS CREEK
             * ROUTE DIVERTED FLOW FROM 79th AVE AND Patrick (CN24E) TO Rock Spri. (CN24D)
             * DDM   ***** Preserved *****

701          KK   RN24E
702          KO       3
703          RS       9    FLOW       0
704          RC    0.05     .06     .05    1585   .0076
705          RX       0     100     300     360     380     420     620     720
706          RY      10       8       6       2       0       6       8      10
             *
             *
             * *** COMBINE  CN24D*   ***********************************************************
             * COMBINE FLOW FROM BASIN (N24D, RN24F), RN21H, AND RN24E
             * DDM   ***** Preserved *****

707          KK  CN24D*
708          HC       3
             *
             *
             * ******************************************************************************
             * ******************************************************************************
             * ************************      NEW RIVER FLOWS      ***************************
             * ******************************************************************************
             * ******************************************************************************
             *
             *
             * *** BASIN N27F ****************************************************************
             * DDM   ***** Preserved *****
L                                    HEC-1 INPUT                                          PAGE 30

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
709          KK    N27F   BASIN
710          KM   SUB-BASIN N27F
711          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
712          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
713          KM     L = 1.07  Kb = .049  Adj. Slope =  304.0
714          BA    .284
715          LG    0.35    0.35    3.95    0.48      16
716          UC   0.229   0.156
717          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
718          UA     100
             *
             *
             * *** ROUTE RN27F ***************************************************************
             * ROUTE RN27F IS 1409 FT WITH A SLOPE OF 0.0099
             * CROSS SECTION IS A SMALL NATURAL WASH
             * SOUTH ALONG NATURAL WASH
             * ROUTE FLOW TO CN27G FROM BASIN CN27F (jomax RD.)
             * DDM   ***** Preserved *****

719          KK   RN27F
720          RS       3    FLOW       0
721          RC    0.05     .06     .05    1409  0.0099
722          RX       0     700     800     830     832     860     960    1610
723          RY       8       6       5       1       0       5       6       8
             *
             *
             * *** BASIN N27G ****************************************************************
             * DDM   ***** Preserved *****

724          KK    N27G   BASIN
725          KM   SUB-BASIN N27G
726          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
727          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
728          KM     L = 1.39  Kb = .049  Adj. Slope =  297.3
729          BA    .262
730          LG    0.35    0.35    4.00    0.47      12
731          UC   0.271   0.243
732          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
733          UA     100
             *
             *
             * *** COMBINE  CN27G ************************************************************
             * COMBINE FLOW FROM BASINS N27G AND RN27F
             * at Jomax RD AND Approx. 76th AVE.
             * DDM   ***** Preserved *****

734          KK   CN27G
735          HC       2
             *
             *
             * *** ROUTE RN27G ***************************************************************
             * ROUTE RN27G IS 1925 FT WITH A SLOPE OF 0.0099
             * CROSS SECTION IS A MEDIUM NATURAL WASH
             * ALONG NATURAL WASH
             * ROUTE FLOW FROM Jomax & 76th AVE CN27G) TO NEW RIVER (CN27C)
             * DDM   ***** Preserved *****
1                                    HEC-1 INPUT                                          PAGE 31

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

736          KK   RN27G
737          RS       3    FLOW       0
738          RC    0.05     .06     .05    1925  0.0099
739          RX       0     100     300     360     380     420     620     720
740          RY      10       8       6       2       0       6       8      10
             *
             *
             * *** BASIN N27E ****************************************************************
             * DDM   ***** Preserved *****

741          KK    N27E   BASIN
742          KM   SUB-BASIN N27E
743          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
744          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
```

```
745          KM     L =  .73  Kb = .051  Adj. Slope =   42.0
746          BA    .188
747          LG    0.35    0.35    3.88    0.51       2
748          UC   0.433   0.295
749          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
750          UA     100
             *
             *
             * *** ROUTE RN27E ***************************************************************
             * ROUTE RN27E IS 1575 FT WITH A SLOPE OF 0.007
             * CROSS SECTION IS A MEDIUM NATURAL WASH
             * ALONG NEW RIVER
             * ROUTE FLOW TO CN27C FROM BASIN  CN27E (jomax alignment)
             * DDM   ***** Preserved *****

751          KK   RN27E
752          RS       4    FLOW       0
753          RC    0.05     .06     .05    1575   0.007
754          RX       0     100     300     360     380     420     620     720
755          RY      10       8       6       2       0       6       8      10
             *
             *
             * *** BASIN N27H ****************************************************************
             * DDM   ***** Preserved *****

756          KK    N27H   BASIN
757          KM   SUB-BASIN N27H
758          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
759          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
760          KM     L = 1.01  Kb = .051  Adj. Slope =  254.6
761          BA    .211
762          LG    0.35    0.35    4.00    0.47      10
763          UC   0.242   0.187
764          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
765          UA     100
             *
             *
             * *** ROUTE RN27H ***************************************************************
             * ROUTE RN27H IS 2852 FT WITH A SLOPE OF 0.0098
             * CROSS SECTION IS A MEDIUM NATURAL WASH
             * ALONG NATURAL WASH
             * ROUTE FLOW TO CN27C (NEW RIVER) FROM BASIN CN27H (Jomax)
             * DDM   ***** Preserved *****
1                                        HEC-1 INPUT                                          PAGE 32

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

766          KK   RN27H
767          RS       6    FLOW       0
768          RC    0.05     .06     .05    2852  0.0098
769          RX       0     100     300     360     380     420     620     720
770          RY      10       8       6       2       0       6       8      10
             *
             *
             * *** BASIN N27C ****************************************************************
             * DDM   ***** Preserved *****

771          KK    N27C   BASIN
772          KM   SUB-BASIN N27C
773          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
774          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
775          KM     L =  .48  Kb = .056  Adj. Slope =   50.0
776          BA    .086
777          LG    0.35    0.35    3.92    0.49       0
778          UC   0.313   0.229
779          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
780          UA     100
             *
             * *** COMBINE  CN27C ************************************************************
             * COMBINE FLOW FROM BASIN N27C, RN27H, RN27E, RN27G
             * NEW RIVER SOUTH OF Jomax RD.
             * DDM   ***** Preserved *****

781          KK   CN27C
```

```
782          HC       4
             *
             *
             * *** ROUTE RN27C ***********************************************************
             * ROUTE RN27C IS 490 FT WITH A SLOPE OF 0.0082
             * CROSS SECTION IS NEW RIVER (MEASURED)
             * ALONG NEW RIVER
             * ROUTE FLOW TO CN27B FROM CN27C
             * DDM   ***** Preserved *****

783          KK   RN27C
784          RS       1    FLOW       0
785          RC    0.05     .06     .05     490   .0082
786          RX       0     304     318     350     455     611     745    1198
787          RY       9       6       0       0       2       3       2       7
             *
             *
             * *** BASIN N27I ************************************************************
             * DDM   ***** Preserved *****

788          KK    N27I   BASIN
789          KM   SUB-BASIN N27I
790          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
791          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
792          KM     L =  .72  Kb = .052  Adj. Slope =  218.4
793          BA    .165
794          LG    0.35    0.35    4.60    0.34       9
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

795          UC   0.213   0.143
796          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
797          UA     100
             *
             *
             * *** ROUTE RN27I ***********************************************************
             * ROUTE RN27I IS 3709 FT WITH A SLOPE OF 0.0097
             * CROSS SECTION IS A MEDIUM NATURAL WASH
             * ALONG NATURAL WASH
             * *** ROUTE FLOW TO CN27B FROM BASIN CN27I  ********************
             * DDM   ***** Preserved *****

798          KK   RN27I
799          RS       8    FLOW       0
800          RC    0.05     .06     .05    3709   .0097
801          RX       0     100     300     360     380     420     620     720
802          RY      10       8       6       2       0       6       8      10
             *
             *
             * *** BASIN N27B ************************************************************
             * DDM   ***** Preserved *****

803          KK    N27B   BASIN
804          KM   SUB-BASIN N27B
805          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
806          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
807          KM     L =  .65  Kb = .056  Adj. Slope =   52.0
808          BA    .081
809          LG    0.35    0.35    3.95    0.48       0
810          UC   0.387   0.383
811          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
812          UA     100
             *
             *
             * *** BASIN N27J ************************************************************
             * DDM   ***** Inserted *****

813          KK    N27J   BASIN
814          KM   SUB-BASIN N27J
815          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
816          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
817          KM     L =  .71  Kb = .051  Adj. Slope =  281.5
818          BA    .187
819          LG    0.35    0.37    5.30    0.24       3
```

```
820          UC   0.196   0.120
821          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
822          UA     100
             *
             *
             * *** DIVERSION DN27J ***********************************************************
             * DIVERSION AT JOMAX RD. AND Terramar Blvd. MAIN FLOW southwest ON natural
             * chanel,  SPLIT SOUTH ON terramar Blvd.
             * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE 34

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


823          KK   DN27J
824          DT   N27JI
825          DI       0       1     111     222     333     444     555
826          DQ       0      .1      14      50      96     155     222
             *
             *
             * *** ROUTE RN27JW ***************************************************************
             * ROUTE RN27JW IS 4085 FT WITH A SLOPE OF 0.0098
             * CROSS SECTION IS A MEDIUM NATURAL WASH
             * ALONG NATURAL WASH
             * ROUTE FLOW FROM Jomax/terramar (CN27J) TO NEW RIVER (CN27B)
             * DDM   ***** Preserved *****

827          KK  RN27JW
828          RS      10    FLOW       0
829          RC    0.05     .06     .05    4085  0.0098
830          RX       0     100     300     360     380     420     620     720
831          RY      10       8       6       2       0       6       8      10
             *
             *
             * *** COMBINE CN27B   ************************************************************
             * COMBINE FLOW FROM BASINS N27B, RN27I, RN27JW, AND RN27C
             * At NEW RIVER
             * DDM   ***** Preserved *****

832          KK   CN27B
833          HC       4
             *
             *
             * *** ROUTE RN27B ****************************************************************
             * ROUTE RN27B IS 1515 FT WITH A SLOPE OF 0.0079
             * CROSS SECTION IS NEW RIVER (MEASURED)
             * ALONG NEW RIVER
             * ROUTE FLOW TO CN27* FROM CN27B
             * DDM   ***** Preserved *****

834          KK   RN27B
835          RS       3    FLOW       0
836          RC    0.05     .06     .05    1515  0.0079
837          RX       0     357     368     379     496     560     637    1584
838          RY      14       8       5       8       8       0       6      12
             *
             *
             * *** BASIN N27D *****************************************************************
             * DDM   ***** Preserved *****

839          KK    N27D   BASIN
840          KM   SUB-BASIN N27D
841          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
842          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
843          KM     L =  .65  Kb = .047  Adj. Slope =   49.0
844          BA    .089
845          LG    0.20    0.28    3.95    0.51      23
846          UC   0.342   0.316
                                           HEC-1 INPUT                                          PAGE 35

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

847          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
848          UA     100
             *
```

```
                *
                * *** STORAGE ROUTING LN27D ***********************************************
                * *** TERRAMAR RESIDENTIAL DEVELOPMENT STORAGE - (ACCOUNTED) **************
                * DDM   ***** Preserved *****

849             KK   LN27D
850             DT  LN27DD     4.8
851             DI       0     100    1000   10000
852             DQ       0     100    1000   10000
                *
                *
                * *** DIVERSION RECOVER DRN27J  ***********************************************
                * RECOVER DIVERTED FLOW FROM N27J (JOMAX RD.)
                * FROM THE north at Jomax/Terramar
                * DDM   ***** Preserved *****

853             KK  DRN27J
854             DR   N27JI
                *
                *
                * *** ROUTE RN27JS ************************************************************
                * ROUTE RN27JS IS 1121 FT WITH A SLOPE OF 0.0071
                * CROSS SECTION IS A MEDIUM ROAD (MEASURED)
                * ALONG Terramar Blvd.
                * ROUTE DIVERTED FLOW TO CN27D FROM CN27J
                * DDM   ***** Preserved *****

855             KK  RN27JS
856             RS       4    FLOW       0
857             RC    0.05    0.04     .05    1121  0.0071
858             RX       0       1      23      24      84      85     110     610
859             RY    9.25    1.25    0.25       0       0    0.25    1.25    3.75
                *
                *
                * *** COMBINE  CN27D ******************************************************
                * COMBINE DIVERTED FLOW FROM BASIN N227D AND RN27JS
                * Terramar Blvd. AND Briles RD
                * DDM   ***** Preserved *****

860             KK   CN27D
861             HC       2    0.28
                *
                * *** DIVERSION DN27D *****************************************************
                * DIVERSION SPLIT BETWEEN TERRAMAR AND WASH
                * MAIN FLOW southwest ALONG NATURAL WASH, SPLIT SOUTH ALONG Terramar Blvd
                * DDM   ***** Preserved *****
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

862             KK  DN27DO
863             DT   N27DI
864             DI       0       1      91     182     273     364     455     727
865             DQ       0      .8      81      86      98     130     174     280
                *
                *
                * *** ROUTE RN27DW      ****************************************************
                * ROUTE RN27DW IS 4283 FT WITH A SLOPE OF 0.0103
                * CROSS SECTION IS A MEDIUM NATURAL WASH
                * ALONG NATURAL WASH
                * ROUTE DIVERTED FLOW FROM terramar Blvd (CN27D) TO NEW RIVER (CN27*)
                * DDM   ***** Preserved *****

866             KK  RN27DW
867             KO       3
868             RS      14    FLOW       0
869             RC    0.05     .06     .05    4283   .0103
870             RX       0     100     300     360     380     420     620     720
871             RY      10       8       6       2       0       6       8      10
                *
                *
                * *** DIVERSION RECOVER DRN27D  ***********************************************
                * RECOVER DIVERTED FLOW FROM N27D (TERRAMAR/Briles)
                * DDM   ***** Preserved *****
```

```
872          KK  DRN27D
873          DR   N27DI
             *
             *
             * *** ROUTE RN27DS ***********************************************************
             * ROUTE RN27DS IS 4205 FT WITH A SLOPE OF 0.0105
             * CROSS SECTION IS A MEDIUM ROAD (MEASURED)
             * ALONG Terramar Blvd
             * *** ROUTE DIVERTED FLOW FROM Briles CN27D TO NEW RIVER(CN27*)
             * DDM   ***** Preserved *****

874          KK  RN27DS
875          RS      20    FLOW       0
876          RC    0.05     .06     .05    4205   .0105
877          RX       0       1      23      24      84      85     110     610
878          RY    9.25    1.25    0.25       0       0    0.25    1.25    3.75
             *
             *
             * *** BASIN N27K *************************************************************
             * DDM   ***** Inserted *****

879          KK    N27K   BASIN
880          KM   SUB-BASIN N27K
881          KM   6-HOUR RAINFALL, PATTERN NO. 1.13 WAS USED TO FIND TC & R FOR THIS BASIN
882          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .992
883          KM     L = 1.29  Kb = .044  Adj. Slope =   16.0
884          BA    .626
885          LG    0.35    0.38    5.40    0.23       5
886          UC   0.896   0.524
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

887          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
888          UA     100
             *
             *
             * *** ROUTE RN27K ************************************************************
             * ROUTE RN27K IS 1922 FT WITH A SLOPE OF 0.0026
             * CROSS SECTION IS A MEDIUM NATURAL WASH
             * ALONG NATURAL WASH
             * ROUTE FLOW FROM CN27K TO Jomax RD AND 67th AVE (CN27L)
             * DDM   ***** Preserved *****

889          KK   RN27K
890          RS       6    FLOW       0
891          RC    0.05     .06     .05    1922   .0026
892          RX       0     100     300     360     380     420     620     720
893          RY      10       8       6       2       0       6       8      10
             *
             *
             * *** BASIN N27L *************************************************************
             * DDM   ***** Preserved *****

894          KK    N27L   BASIN
895          KM   SUB-BASIN N27L
896          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
897          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .994
898          KM     L = 1.33  Kb = .045  Adj. Slope =   55.0
899          BA    .467
900          LG    0.34    0.34    4.60    0.34      11
901          UC   0.512   0.341
902          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
903          UA     100
             *
             *
             * *** COMBINE  CN27L *********************************************************
             * COMBINE BASIN RN27K, N27L
             * At INTERSECTION OF Jomax RD. AND 67th AVE
             * DDM   ***** Preserved *****

904          KK   CN27L
905          HC       2
             *
```

```
*
* *** ROUTE RN27L ***********************************************************
* ROUTE RN27L IS 1009 FT WITH A SLOPE OF 0.0099
* CROSS SECTION IS A LARGE MAN-MADE SHOTCRETE CHANNEL (MEASURED)
* ALONG Weir wash CHANNEL
* ROUTE FLOW jomax RD (CN27L) TO  CN250*
* DDM   ***** Preserved *****

KK   RN27L
RS       1    FLOW       0
RC    0.04     .03     .04    1009  0.0099
RX       0     100     150     162     202     214     264     364
RY       7       7       6       0       0       6       7       8
*
*
* *** BASIN N25S ************************************************************
* DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK    N25S   BASIN
KM   SUB-BASIN N25S
KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
KM     L =  .34  Kb = .063  Adj. Slope =  315.0
BA    .027
LG    0.34    0.34    3.95    0.49      67
UC   0.142   0.140
UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
UA     100
*
*
* *** ROUTE RN25S ***********************************************************
* ROUTE RN25S IS 1477 FT WITH A SLOPE OF 0.0305
* CROSS SECTION IS A SUBDIVISION ROAD
* ALONG Local strets
* ROUTE FLOW form 64rd AVE (CN25S) TO Weir Wash (N250*)
* DDM   ***** Preserved *****

KK   RN25S
RS       3    FLOW       0
RC    0.05     .04     .05    1477   .0305
RX       0       1      25      26      56      57    69.5      82
RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
*
*
* *** COMBINE CN250*  *******************************************************
* COMBINE FLOWS RN25S, RN27L
* Weir CHANNEL
* DDM   ***** Preserved *****

KK  CN250*
HC       2
*
*
* *** ROUTE RN250*  *********************************************************
* ROUTE RN250* IS 2524 FT WITH A SLOPE OF 0.0079
* CROSS SECTION IS A LARGE MAN-MADE WASH (MEASURED)
* ALONG Weir CHANNEL
* ROUTE FLOW FROM CN270* TO 67th AVE (N250)
* DDM   ***** Preserved *****

KK  RN250*
RS       3    FLOW       0
RC    0.04    0.03    0.04    2524   .0079
RX       0     100     150     162     202     214     264     364
RY       7       7       6       0       0       6       7       8
*
*
* *** BASIN N250 ************************************************************
* DDM   ***** Preserved *****
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 933          KK    N25O   BASIN
 934          KM   SUB-BASIN N25O
 935          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 936          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
 937          KM     L =  .73  Kb = .046  Adj. Slope =   84.0
 938          BA    .130
 939          LG    0.23    0.30    4.00    0.48      22
 940          UC   0.300   0.242
 941          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
 942          UA     100
              *
              *
              * *** STORAGE ROUTING LN25O ***********************************************
              * *** EAGLE RIDGE RESIDENTIAL DEVELOPMENT STORAGE - (ACCOUNTED) ***********
              * DDM   ***** Preserved *****

 943          KK   LN25O
 944          DT  LN25OD     5.4
 945          DI       0     100    1000   10000
 946          DQ       0     100    1000   10000
              *
              *
              * *** COMBINE  CN25O ***********************************************************
              * COMBINE BASINS N25O, RN27O*
              * at INTERSECTION OF 67th AVE. AND CALLE LEJOS
              * DDM   ***** Preserved *****

 947          KK   CN25O
 948          HC       2
              *
              *
              * *** ROUTE RN25O ***************************************************************
              * ROUTE RN25O IS 5837 FT WITH A SLOPE OF 0.0113
              * CROSS SECTION IS A LARGE MAN-MADE WASH (MEASURED)
              * ALONG Weir CHANNEL
              * ROUTE FLOW FROM 67th AVE (CN25O) TO NEW RIVER (CN27*)
              * DDM   ***** Preserved *****

 949          KK   RN25O
 950          RS       6    FLOW       0
 951          RC    0.04    0.03    0.04    5837  0.0113
 952          RX       0     100     150     162     202     214     264     364
 953          RY       8       7       6       0       0       6       7       8
              *
              *
              * *** COMBINE CN27*       ******************************************************
              * COMBINE RN25O, RN27DW, RN27DS, AND RN27B
              * BASINS ADDED BELOW TO PREVENT ERROR BECAUSE OF TOO MANY HYDROGRAPHS
              * NEW RIVER north OF Happy Valley RD.
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 954          KK   CN27*
 955          HC       4
              *
              *
              * *** BASIN N27 ****************************************************************
              * DDM   ***** Preserved *****

 956          KK     N27   BASIN
 957          KM   SUB-BASIN N27
 958          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 959          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
 960          KM     L = 1.80  Kb = .049  Adj. Slope =  107.0
 961          BA    .282
 962          LG    0.33    0.34    3.33    0.76       8
 963          UC   0.579   0.664
 964          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
 965          UA     100
```

```
                *
                *
                * *** BASIN N27A ***************************************************************
                * DDM   ***** Preserved *****

 966            KK    N27A   BASIN
 967            KM   SUB-BASIN N27A
 968            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 969            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
 970            KM     L =  .77  Kb = .052  Adj. Slope =   47.0
 971            BA    .114
 972            LG    0.33    0.35    4.55    0.35       0
 973            UC   0.425   0.400
 974            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
 975            UA     100
                *
                *
                * *** BASIN N26B ***************************************************************
                * DDM   ***** Preserved *****

 976            KK    N26B   BASIN
 977            KM   SUB-BASIN N26B
 978            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 979            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
 980            KM     L = 1.29  Kb = .036  Adj. Slope =   53.0
 981            BA    .225
 982            LG    0.16    0.31    4.00    0.45      17
 983            UC   0.450   0.438
 984            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
 985            UA     100
                *
                *
                * *** STORAGE ROUTING LN26B ***********************************************
                * *** TERRAMAR RESIDENTIAL DEVELOPMENT STORAGE - (ACCOUNTED) **************
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE 41

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 986            KK   LN26B
 987            DT  LN26BD    12.4
 988            DI       0     100    1000   10000
 989            DQ       0     100    1000   10000
                *
                *
                * *** COMBINE CN27      ***********************************************************
                * COMBINE BASINS N27, N27A, 26B, AND (RN25O, RN27DS, RN27DW, RN27B)
                * At NEW RIVER North OF Happy Valley RD.
                * DDM   ***** Preserved *****

 990            KK    CN27
 991            HC       4
                *
                *
                * *** ROUTE RN27 ***************************************************************
                * ROUTE RN27 IS 1501 FT WITH A SLOPE OF 0.0027
                * CROSS SECTION IS NEW RIVER (MEASURED)
                * ALONG NEW RIVER
                * ROUTE FLOW TO Happy Valley RD. (CN27) FROM (CN26*)
                * DDM   ***** Preserved *****

 992            KK    RN27
 993            RS       6    FLOW       0
 994            RC    0.05     .06     .05    1501  0.0027
 995            RX       0     281     386     436     672     828    1093    1300
 996            RY      17      13       1       0       1      11      12      13
                *
                *
                * *** BASIN N26 ****************************************************************
                * DDM   ***** Preserved *****

 997            KK     N26   BASIN
 998            KM   SUB-BASIN N26
 999            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
```

```
1000        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
1001        KM     L =  .33  Kb = .061  Adj. Slope =   55.0
1002        BA    .040
1003        LG    0.35    0.35    3.88    0.50       0
1004        UC   0.250   0.205
1005        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1006        UA     100
            *
            *
            * *** BASIN N26A ***************************************************************
            * DDM   ***** Preserved *****

1007        KK    N26A   BASIN
1008        KM   SUB-BASIN N26A
1009        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1010        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
1011        KM     L = 1.29  Kb = .041  Adj. Slope =   50.0
1012        BA    .354
1013        LG    0.25    0.31    4.00    0.48       9
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1014        UC   0.575   0.444
1015        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1016        UA     100
            *
            *
            * *** STORAGE ROUTING LN26A ***********************************************
            * *** TERRAMAR RESIDENTIAL DEVELOPMENT STORAGE - (ACCOUNTED) **************
            * DDM   ***** Preserved *****

1017        KK   LN26A
1018        DT  LN26AD    12.6
1019        DI       0     100    1000   10000
1020        DQ       0     100    1000   10000
            *
            *
            * *** COMBINE CN26*  ************************************************************
            * COMBINE RN27 AND BASINS N26, N26A
            * NEW RIVER at Happy Valley RD (FLOW in upstream reach)
            * DDM   ***** Preserved *****

1021        KK   CN26*
1022        HC       3
            *
            *
            * *** BASIN N25R ****************************************************************
            * DDM   ***** Preserved *****

1023        KK    N25R   BASIN
1024        KM   SUB-BASIN N25R
1025        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1026        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
1027        KM     L =  .48  Kb = .056  Adj. Slope =  315.0
1028        BA    .093
1029        LG    0.34    0.34    3.95    0.49      67
1030        UC   0.158   0.103
1031        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1032        UA     100
            *
            *
            * *** ROUTE RN25R ***************************************************************
            * ROUTE RN25R IS 2400 FT WITH A SLOPE OF 0.0333
            * CROSS SECTION IS A SUBDIVISION ROAD
            * ALONG local STREETS
            * ROUTE FLOW TO CN25M (Happy Valley RD) FROM CN25R 64th AVE.
            * DDM   ***** Preserved *****

1033        KK   RN25R
1034        RS       3    FLOW       0
1035        RC    0.04    0.03    0.04    2400  0.0333
1036        RX       0       1      25      26      56      57    69.5      82
1037        RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
            *
```

```
                *
                * *** BASIN N25Q ***************************************************************
                * DDM    ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE 43

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1038            KK    N25Q   BASIN
1039            KM   SUB-BASIN N25Q
1040            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1041            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
1042            KM     L =  .32  Kb = .063  Adj. Slope =  315.0
1043            BA    .029
1044            LG    0.34    0.34    3.95    0.49      67
1045            UC   0.138   0.124
1046            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1047            UA     100
                *
                *
                * *** ROUTE RN25Q ***************************************************************
                * ROUTE RN25Q IS 1662 FT WITH A SLOPE OF 0.0361
                * CROSS SECTION IS A SUBDIVISION ROAD
                * Alond Local STREETS
                * ROUTE FLOW TO CN25M (happy Valley RD) FROM CN25Q (64rd AVE)
                * DDM    ***** Preserved *****

1048            KK   RN25Q
1049            RS       3    FLOW       0
1050            RC    0.04    0.03    0.04    1662  0.0361
1051            RX       0       1      25      26      56      57    69.5      82
1052            RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
                *
                *
                * *** BASIN N25P ***************************************************************
                * DDM    ***** Preserved *****

1053            KK    N25P   BASIN
1054            KM   SUB-BASIN N25P
1055            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1056            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
1057            KM     L =  .72  Kb = .052  Adj. Slope =  315.0
1058            BA    .172
1059            LG    0.35    0.35    3.95    0.48      58
1060            UC   0.183   0.118
1061            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1062            UA     100
                *
                *
                * *** ROUTE RN25P ***************************************************************
                * ROUTE RN25P IS 1257 FT WITH A SLOPE OF 0.0048
                * CROSS SECTION IS A MAJOR ROAD
                * ALONG Happy Valley RD.
                * ROUTE FLOW TO CN25M FROM CN25P (64th AVE)
                * DDM    ***** Preserved *****

1063            KK   RN25P
1064            KO       3
1065            RS       2    FLOW       0
1066            RC    0.05    0.03     .05    1257  0.0048
1067            RX       0     500     525     555     570     585     600     601
1068            RY       5       3     2.5     2.5       0       0       3      10
                *
                * *** BASIN N25M ***************************************************************
                * DDM    ***** Preserved *****
                                           HEC-1 INPUT                                          PAGE 44

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1069            KK    N25M   BASIN
1070            KM   SUB-BASIN N25M
1071            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1072            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
1073            KM     L =  .86  Kb = .050  Adj. Slope =  133.0
```

```
1074          BA    .236
1075          LG    0.26    0.26    4.40    0.44      45
1076          UC   0.317   0.209
1077          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1078          UA     100
              *
              *
              * *** STORAGE ROUTING LN25M ***********************************************
              * *** ENTRADA RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *****************
              * DDM   ***** Preserved *****

1079          KK   LN25M
1080          DT  LN25MD    15.1                                                          G
1081          DI       0     100    1000   10000
1082          DQ       0     100    1000   10000
              *
              *
              *
              * *** COMBINE  CN25M ***********************************************************
              * COMBINE BASINS RN25R, RN25Q, RN24P, N25M
              * At Happy Valley RD EAST OF 67th Avenue
              * DDM   ***** Preserved *****

1083          KK   CN25M
1084          HC       4
              *
              *
              * *** DIVERSION DN25M ***********************************************************
              * DIVERSION HAPPY VALLEY RD @ 67TH AVENUE MAIN WEST ALONG Happy Valley RD.
              * SPLIT SOUTH
              *
              * ASSUME A 8X6 BOX (NEED TO FIELD VERIFY)
              *
              * THE BOX CAN PASS 345 CFS WHEN THE HEADWATER IS 6 FEET
              *
              * THE DIVERSION IS A SMALL ROADSIDE DITCH WITH ROAD THAT CAN CARRY 125 CFS
              *
              * DDM   ***** Preserved *****

1085          KK   DN25M
1086          DT   N25MI
1087          DI       0       1     100     345     500     800    1000
1088          DQ       0     .98      99     344     450     720     875
              *
              *
              * *** ROUTE RN25MW  ************************************************************
              * ROUTE RN25MW IS 1114 FT WITH A SLOPE OF 0.0028
              * CROSS SECTION IS A MAJOR ROAD
              * ALONG Happy Valley RD
              * ROUTE FLOW FROM CN25M TO INTERSECTION OF Happy Valley RD AND 67th AVE (CX3)
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1089          KK  RN25MW
1090          RS       8    FLOW       0
1091          RC    0.05    0.04    0.05    1114   .0028
1092          RX       0     501     601     602     667     668     693    1020
1093          RY    3.25    1.25    0.25       0       0    0.25    1.25    3.25
              *
              *
              * *** BASIN N25N ***************************************************************
              * DDM   ***** Preserved *****

1094          KK    N25N   BASIN
1095          KM   SUB-BASIN N25N
1096          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1097          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
1098          KM     L =  .32  Kb = .064  Adj. Slope =   44.0
1099          BA    .025
1100          LG    0.25    0.25    4.30    0.48      30
1101          UC   0.258   0.271
1102          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
```

```
1103        UA     100
            *
            *
            * *** STORAGE ROUTING LN25N ***********************************************
            * *** ENTRADA RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *****************
            * DDM   ***** Preserved *****

1104        KK   LN25N
1105        DT  LN25ND     1.6
1106        DI       0     100    1000   10000
1107        DQ       0     100    1000   10000
            *
            *
            * *** ROUTE RN25N ************************************************************
            * ROUTE RN25N IS 725 FT WITH A SLOPE OF 0.0097
            * CROSS SECTION IS A MEDIUM ROAD (MEASURED)
            * ALONG 67th AVE.
            * *** ROUTE FLOW TO CX3 (Happy Valley RD/67th AVE) FROM CN25N
            * DDM   ***** Preserved *****

1108        KK   RN25N
1109        RS       3    FLOW       0
1110        RC    0.04    0.03    0.04     725  0.0097
1111        RX       0     417     442     443     475     476     526     527
1112        RY    3.25    1.25    0.25       0       0    0.25    1.25    9.25
            *
            *
            * *** COMBINE CX3 ************************************************************
            * COMBINE FLOWS RN25N AND RN25M
            * At INTERSECTION OF Happy Valley RD AND 67th AVE.
            * DDM   ***** Preserved *****
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1113        KK     CX3
1114        HC       2
            *
            * *** DIVERSION DX3 *********************************************************
            * DIVERSION HAPPY VALLEY RD @ 67th AVENUE MAIN WEST ALONG Happy Valley Road
            * SPLIT SOUTH ALONG 67th AVE.
            * DDM   ***** Preserved *****

1115        KK    DX3O
1116        KO                                     21
1117        DT     X3I
1118        DI       0       1      46      91     182     364     545     727    1000
1119        DQ       0      .2      25      50     100     200     300     405     560
            *
            *
            * *** ROUTE RX3W *************************************************************
            * ROUTE RX3W IS 5525 FT WITH A SLOPE OF 0.0081
            * CROSS SECTION IS A MAJOR ROAD (MEASURED)
            * ALONG Happy Valley RD.
            * ROUTE FLOW TO CN26 FROM CX3
            * DDM   ***** Preserved *****

1120        KK    RX3W
1121        RS      15    FLOW       0
1122        RC    0.04    0.03    0.04    5525  0.0081
1123        RX       0      60      61      96      97     122     322     522
1124        RY       5    0.25       0       0    0.25    1.25    3.25    4.25
            *
            *
            * *** COMBINE  CN26 **********************************************************
            * COMBINE (N26,N26A, RN27) AND RX3W
            * NEW RIVER at Happy Valley RD.
            * DDM   ***** Preserved *****

1125        KK    CN26
1126        HC       2
            *
            *
            * *** ROUTE RN26 *************************************************************
```

```
                * ROUTE RN26 IS 1667 FT WITH A SLOPE OF 0.006
                * CROSS SECTION IS NEW RIVER (MEASURED)
                * ALONG NEW RIVER
                * ROUTE FLOW TO CN25J(Hatfield RD.) FROM CN26 (happy Valley RD.)
                * DDM   ***** Preserved *****

1127            KK    RN26
1128            RS       5    FLOW       0
1129            RC    0.05     .06     .05    1667   0.006
1130            RX       0     281     386     436     672     828    1093    1300
1131            RY      17      13       1       0       1      11      12      13
                *
                *
                * *** BASIN N25L ***********************************************************
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE 47

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1132            KK    N25L   BASIN
1133            KM   SUB-BASIN N25L
1134            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1135            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
1136            KM     L =  .42  Kb = .044  Adj. Slope =   48.0
1137            BA    .059
1138            LG    0.23    0.35    4.50    0.35       5
1139            UC   0.250   0.199
1140            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1141            UA     100
                *
                *
                * *** DIVERSION N25L *******************************************************
                * DIVERSION Hatfield WEST OF 67th AVE. MAIN WEST SPLIT SOUTH
                * DDM   ***** Preserved *****

1142            KK   DN25L
1143            DT   N25LI
1144            DI       0       1      91     182     273     364     455     545
1145            DQ       0      .5      47     101     152     203     254     305
                *
                *
                * *** ROUTE RN25LW *********************************************************
                * ROUTE RN25LW IS 1995 FT WITH A SLOPE OF 0.0065
                * CROSS SECTION IS A SMALL ROAD
                * ALONG Hatfield
                * ROUTE FLOW TO N25K FROM CN25L
                * DDM   ***** Preserved *****

1146            KK  RN25LW
1147            RS      13    FLOW       0
1148            RC    0.05    0.04    0.05    1995  0.0065
1149            RX       0     500     525     526     566     567     592    1092
1150            RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
                *
                *
                * DDM   ***** Preserved *****

1151            KK    N25K   BASIN
1152            KM   SUB-BASIN N25K
1153            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1154            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
1155            KM     L =  .59  Kb = .048  Adj. Slope =  151.0
1156            BA    .090
1157            LG    0.28    0.34    4.60    0.32       6
1158            UC   0.217   0.176
1159            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1160            UA     100
                *
                *
                * *** COMBINE  CN25K *******************************************************
                * COMBINE BASINS RN25LW, N25K
                * Hatfield WEST OF 67th AVE
                * DDM   ***** Preserved *****
                                           HEC-1 INPUT                                          PAGE 48
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1161          KK   CN25K
1162          HC       2
              *
              *
              * *** DIVERSION DN25K ***********************************************************
              * DIVERSION HATFIELD RD WEST OF 67th AVE MAIN WEST, SPLIT SOUTH
              * DDM   ***** Preserved *****

1163          KK   DN25K
1164          DT   N25KI
1165          DI       0       1      40      80     100     150     200     300
1166          DQ       0      .1      12      50      70     120     170     270
              *
              *
              * *** ROUTE RN25KW ***************************************************************
              * ROUTE RN25KW IS 2562 FT WITH A SLOPE OF 0.0086
              * CROSS SECTION IS A SMALL ROAD
              * ALONG Hatfield RD.
              * ROUTE FLOW TO CN25J(NEW RIVER) FROM CN25K
              * DDM   ***** Preserved *****

1167          KK  RN25KW
1168          RS      18    FLOW       0
1169          RC    0.05    0.04    0.05    2562  0.0086
1170          RX       0     500     525     526     566     567     592    1092
1171          RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
              *
              *
              * DDM   ***** Preserved *****

1172          KK    N25J   BASIN
1173          KM   SUB-BASIN N25J
1174          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1175          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
1176          KM     L =  .50  Kb = .055  Adj. Slope =   60.0
1177          BA    .100
1178          LG    0.35    0.35    3.92    0.49       0
1179          UC   0.292   0.201
1180          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1181          UA     100
              *
              *
              * *** COMBINE  CN25J *************************************************************
              * COMBINE BASINS N25J, RN26, RN25KW
              * NEW RIVER at Hatfield
              * DDM   ***** Preserved *****

1182          KK   CN25J
1183          HC       3
              *
              *
              * *** ROUTE RN25J ****************************************************************
              * ROUTE RN25J IS 2548 FT WITH A SLOPE OF 0.0047
              * CROSS SECTION IS NEW RIVER (MEASURED)
              * ALONG NEW RIVER
              * ROUTE FLOW TO CN25I FROM CN25J(Hatfield)
              * DDM   ***** Preserved *****
                                        HEC-1 INPUT                                        PAGE 49

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1184          KK   RN25J
1185          RS      10    FLOW       0
1186          RC    0.05     .06     .05    2548  0.0047
1187          RX       0     128     495     520     646     745     941    1218
1188          RY       8       6       4       0       2       0       0       4
              *
              *
              * DDM   ***** Preserved *****

1189          KK    N25G   BASIN
```

```
1190        KM   SUB-BASIN N25G
1191        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1192        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
1193        KM     L =  .46  Kb = .058  Adj. Slope =   48.0
1194        BA    .061
1195        LG    0.33    0.31    4.65    0.32       2
1196        UC   0.317   0.273
1197        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1198        UA     100
            *
            *
            * *** DIVERSION RECOVER DRN25K  ***********************************************
            * RECOVER DIVERTED FLOW FROM HATFIELD RD. N25K
            * DDM   ***** Preserved *****

1199        KK  DRN25K
1200        DR   N25KI
            *
            *
            * *** ROUTE RN25KS ************************************************************
            * ROUTE RN25KS IS 2074 FT WITH A SLOPE OF 0.0068
            * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
            * Trough fields
            * ROUTE FLOW TO CN25G (CALLE LEJOS) FROM CN25K (Hatfield)
            * DDM   ***** Preserved *****

1201        KK  RN25KS
1202        RS      17    FLOW       0
1203        RC    0.05    0.05    0.05    2074  0.0068
1204        RX       0     400     800    1200    1600    2000    2400    2800
1205        RY       3       1      .5       0       0      .5       1       3
            *
            *
            * *** COMBINE  CN25G **********************************************************
            * COMBINE BASINS N25K, RN25KS
            * DDM   ***** Preserved *****

1206        KK   CN25G
1207        HC       2    0.21
            *
            *
            * *** ROUTE RN25G *************************************************************
            * ROUTE RN25G IS 2633 FT WITH A SLOPE OF 0.0076
            * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
            * ALONG fields
            * ROUTE FLOW TO CN25I (NEW RIVER) FROM CN25G (CALLE LEJOS)
            * DDM   ***** Preserved *****
1                                   HEC-1 INPUT                                          PAGE 50

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1208        KK   RN25G
1209        RS      27    FLOW       0
1210        RC    0.05     .06     .05    2633  0.0076
1211        RX       0     400     800    1200    1600    2000    2400    2800
1212        RY       3       1      .5       0       0      .5       1       3
            *
            *
            * DDM   ***** Preserved *****

1213        KK    N25I   BASIN
1214        KM   SUB-BASIN N25I
1215        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1216        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
1217        KM     L =  .55  Kb = .054  Adj. Slope =   51.0
1218        BA    .118
1219        LG    0.34    0.32    4.10    0.46       1
1220        UC   0.346   0.239
1221        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1222        UA     100
            *
            *
            * *** COMBINE  CN25I **********************************************************
            * COMBINE BASINS N25I, RN25G, RN25J
```

```
                * NEW RIVER north OF PINNACLE PEAK RD
                * DDM   ***** Preserved *****

1223            KK   CN25I
1224            HC       3    4.99
                *
                *
                * *** ROUTE RN25I ***************************************************************
                * ROUTE RN25I IS 1522 FT WITH A SLOPE OF 0.0046
                * CROSS SECTION IS NEW RIVER (MEASURED)
                * ALONG NEW RIVER
                * ROUTE FLOW TO CN25(PINNACLE PEAK RD) FROM CN25I
                * DDM   ***** Preserved *****

1225            KK   RN25I
1226            KO       3                                21
1227            RS       6    FLOW       0
1228            RC    0.05     .06     .05    1522  0.0046
1229            RX       0     128     495     520     646     745     941    1218
1230            RY       8       6       4       0       2       0       0       4
                *
                *
                * DDM   ***** Preserved *****

1231            KK    N25E   BASIN
1232            KM   SUB-BASIN N25E
1233            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1234            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
1235            KM     L = 1.30  Kb = .046  Adj. Slope =   47.0
1236            BA    .272
1237            LG    0.29    0.31    3.88    0.51       8
1                                             HEC-1 INPUT                                          PAGE 51

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1238            UC   0.646   0.590
1239            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1240            UA     100
                *
                *
                * *** DIVERSION RECOVER DRN25M  ************************************************
                * RECOVER DIVERTED FLOW FROM N25M (happy Valley RD EAST OF 67th AVE)
                * DDM   ***** Preserved *****

1241            KK  DRN25M
1242            DR   N25MI
                *
                *
                * *** ROUTE RN25MS ***************************************************************
                * ROUTE RN25MS IS 3470 FT WITH A SLOPE OF 0.0098
                * CROSS SECTION IS A NATURAL CHANNEL (MEASURED)
                * ALONG Natural CHANNEL EAST OF 67th AVE.
                * ROUTE FLOW TO CN25E FROM CN25M
                * DDM   ***** Preserved *****

1243            KK  RN25MS
1244            RS       8    FLOW       0
1245            RC    0.05     .06     .05    3470  0.0098
1246            RX       0     438     635     685     695     735     831    1052
1247            RY      82      22       2       0       0       2       4      15
                *
                *
                * *** DIVERSION RECOVER DRX3  ***************************************************
                * RECOVER DIVERTED FLOW FROM  CX3(Happy Valley RD AND 67th AVE.)
                * DDM   ***** Preserved *****

1248            KK    DRX3
1249            DR     X3I
                *
                *
                * *** ROUTE RX3S *****************************************************************
                * ROUTE RX3S IS 3183 FT WITH A SLOPE OF 0.0091
                * CROSS SECTION IS A SMALL ROAD
                * ALONG 67th AVE.
                * ROUTE FLOW TO CN25E(CALLE LEJOS) FROM CX3(Happy Valley RD.)
```

```
                * DDM   ***** Preserved *****

1250            KK    RX3S
1251            RS       9    FLOW       0
1252            RC    0.05    0.03    0.05    3183  0.0091
1253            RX       0     500     525     526     556     557     582    1082
1254            RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
                *
                *
                * *** COMBINE  CN25E ***********************************************************
                * COMBINE BASINS N25E, RN25MS, AND RX3S
                * at 67th AVE AND CALLE LEJOS
                * AREA for CX3 AND N25E were added TO obtain correct AREA reduction
                * CX3 (0.55) N25E (0.27) AREA used 0.55 + 0.27 = 0.82
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE 52

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1255            KK   CN25E
1256            HC       3    0.82
                *
                *
                * *** DIVERSION DN25E ***********************************************************
                * DIVERSION 67TH AVE FROM HAPPY VALLEY TO CALLE LEJOS MAIN WEST SPLIT SOUTH
                * DDM   ***** Preserved *****

1257            KK   DN25E
1258            DT   N25EI
1259            DI       0       1     100     200     300     500     800    1000    2000
1260            DQ       0      .4      40      40      40      40      40      40      40
                *
                *
                * *** ROUTE RN25EW **************************************************************
                * ROUTE RN25EW IS 1650 FT WITH A SLOPE OF 0.0048
                * CROSS SECTION IS A SMALL ROAD
                * ALONG CALLE LEJOS
                * ROUTE FLOW TO CN25F FROM CN25E (67th AVE.)
                * DDM   ***** Preserved *****

1261            KK  RN25EW
1262            RS       5    FLOW       0
1263            RC    0.05    0.03     .05    1650  0.0048
1264            RX       0     500     525     526     556     557     582    1082
1265            RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
                *
                *
                * DDM   ***** Preserved *****

1266            KK    N25F   BASIN
1267            KM   SUB-BASIN N25F
1268            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1269            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
1270            KM     L =  .41  Kb = .056  Adj. Slope =   49.0
1271            BA    .087
1272            LG    0.34    0.33    4.60    0.34       1
1273            UC   0.287   0.182
1274            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1275            UA     100
                *
                *
                * *** DIVERSION RECOVER DRN25L  ************************************************
                * RECOVER DIVERTED FLOW FROM  CN25L (Hatfield)
                * DDM   ***** Preserved *****

1276            KK  DRN25L
1277            DR   N25LI
                *
                *
                * *** ROUTE RN25LS **************************************************************
                * ROUTE RN25LS IS 1703 FT WITH A SLOPE OF 0.01
                * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
                * ALONG fields
                * ROUTE FLOW TO CN25F(CALLE LEJOS) FROM CN25L (Hatfield)
```

```
                * DDM   ***** Preserved *****
1                                   HEC-1 INPUT                                                    PAGE 53

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1278            KK  RN25LS
1279            RS      18    FLOW       0
1280            RC    0.05     .06     .05    1703    0.01
1281            RX       0     400     800    1200    1600    2000    2400    2800
1282            RY       3       1      .5       0       0      .5       1       3
                *
                *
                * *** COMBINE  CN25F ***********************************************************
                * COMBINE BASINS N25F, RN25LS, AND RN25EW
                * CALLE LEJOS WEST OF 67th AVE.
                * DDM   ***** Preserved *****

1283            KK   CN25F
1284            HC       3    0.97
                *
                *
                * *** ROUTE RN25F ***************************************************************
                * ROUTE RN25F IS 3636 FT WITH A SLOPE OF 0.0072
                * CROSS SECTION IS A SMALL NATURAL WASH
                * ALONG small natural drainageway
                * ROUTE FLOW TO CN25B (PINNACLE PEAK) FROM CN25F (CALLE LEJOS)
                * DDM   ***** Preserved *****

1285            KK   RN25F
1286            RS       7    FLOW       0
1287            RC    0.05     .06     .05    3636  0.0072
1288            RX       0     350     450     480     482     510     610     910
1289            RY       7       6       5       1       0       5       6       7
                *
                *
                * DDM   ***** Preserved *****

1290            KK    N25D   BASIN
1291            KM   SUB-BASIN N25D
1292            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1293            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
1294            KM     L =  .45  Kb = .049  Adj. Slope =   87.0
1295            BA    .202
1296            LG    0.30    0.29    4.65    0.33       7
1297            UC   0.313   0.186
1298            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1299            UA     100
                *
                *
                * *** DIVERSION RECOVER DRN25E  ************************************************
                * RECOVER DIVERTED FLOW FROM  CN25E (CALLE LEJOS)
                * DDM   ***** Preserved *****

1300            KK  DRN25E
1301            DR   N25EI
                *
                *
                * *** ROUTE RN25ES **************************************************************
                * ROUTE RN25ES IS 2578 FT WITH A SLOPE OF 0.005
                * CROSS SECTION IS A SMALL ROAD
                * ALONG 67th AVE.
                * ROUTE FLOW TO CN25D(PINNACLE PEAK RD) FROM CN25E (CALLE LEJOS)
                * DDM   ***** Preserved *****
                                    HEC-1 INPUT                                                    PAGE 54

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1302            KK  RN25ES
1303            RS      28    FLOW       0
1304            RC    0.05     .06     .05    2578   0.005
1305            RX       0     500     525     526     556     557     582    1082
1306            RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
                *
```

```
                *
                * *** COMBINE  CN25D ************************************************************
                * COMBINE BASINS N25D AND RN25ES
                * INTERSECTION OF PINNACLE PEAK AND 67th AVE.
                * DDM   ***** Preserved *****

1307            KK   CN25D
1308            HC       2
                *
                *
                * *** DIVERSION DN25D ************************************************************
                * DIVERSION 67TH AVE(SPLIT) / PINNACLE PEAK RD (MAIN)
                * DDM   ***** Preserved *****

1309            KK   DN25D
1310            DT   N25DI
1311            DI       0       1      73     145     218     291     364     436     509     800
1312            DQ       0      .4      40      78     117     156     180     237     280     445
                *
                *
                * *** ROUTE RN25DW ***********************************************************
                * ROUTE RN25DW IS 2674 FT WITH A SLOPE OF 0.0056
                * CROSS SECTION IS A SMALL ROAD WITH A FENCE TO THE WEST
                * ALONG PINNACLE PEAK RD.
                * ROUTE FLOW TO CN25C FROM CN25D (67th AVE.)
                * DDM   ***** Preserved *****

1313            KK  RN25DW
1314            RS       6    FLOW       0
1315            RC    0.05    0.03     .05    2674  0.0056
1316            RX       0       1      14      15      35      36      51     551
1317            RY    9.25    1.25    0.25       0       0    0.25    1.25    3.25
                *
                *
                * DDM   ***** Preserved *****

1318            KK    N25C   BASIN
1319            KM   SUB-BASIN N25C
1320            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1321            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
1322            KM     L =  .70  Kb = .052  Adj. Slope =   39.0
1323            BA    .168
1324            LG    0.33    0.31    4.80    0.30       2
1325            UC   0.442   0.311
1326            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1327            UA     100
                *
                *
                * *** COMBINE  CN25C ************************************************************
                * COMBINE BASINS N25C AND RN25DW
                * PINNACLE PEAK RD WEST OF 67th AVE
                * DDM   ***** Preserved *****
```



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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1328            KK   CN25C
1329            HC       2
                *
                *
                * *** DIVERSION DN25C ************************************************************
                * DIVERSION WEST OF 67th AVE(SPLIT) / PINNACLE PEAK RD (MAIN)
                * DDM   ***** Preserved *****

1330            KK   DN25C
1331            DT   N25CI
1332            DI       0       1     118     236     355     473     591     709     827
1333            DQ       0      .4      44      88     133     177     221     265     310
                *
                *
                * *** ROUTE RN25CW ***********************************************************
                * ROUTE RN25CW IS 485 FT WITH A SLOPE OF 0.0082
                * CROSS SECTION IS A SMALL ROAD WITH A FENCE TO THE WEST
                * ALONG PINNACLE PEAK RD.
```

```
                * ROUTE FLOW TO CN25B FROM  CN25C
                * DDM   ***** Preserved *****

1334            KK  RN25CW
1335            RS       1    FLOW       0
1336            RC    0.05    0.03    0.05     485  0.0082
1337            RX       0       1      14      15      35      36      51     551
1338            RY    9.25    1.25    0.25       0       0    0.25    1.25    3.25
                *
                *
                * DDM   ***** Preserved *****

1339            KK    N25B   BASIN
1340            KM   SUB-BASIN N25B
1341            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1342            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
1343            KM     L =  .78  Kb = .053  Adj. Slope =   40.0
1344            BA    .113
1345            LG    0.31    0.31    4.70    0.31       3
1346            UC   0.471   0.456
1347            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1348            UA     100
                *
                *
                * *** COMBINE  CN25B ***********************************************************
                * COMBINE BASINS N25B, RN25CW AND RN25F
                * PINNACLE PEAK RD. WEST OF 67th AVE
                * DDM   ***** Preserved *****

1349            KK   CN25B
1350            HC       3
                *
                *
                * *** DIVERSION DN25B ***********************************************************
                * DIVERSION WEST OF 67TH AVE.  InTO SUBDIVISION(SPLIT) / PINNACLE PEAK RD (MAIN)
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE 56

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1351            KK   DN25B
1352            DT   N25BI
1353            DI       0       1     118     236     355     473     591     709     827
1354            DQ       0      .4      44      88     133     177     221     265     310
                *
                *
                * *** ROUTE RN25BW **************************************************************
                * ROUTE RN25BW IS 2030 FT WITH A SLOPE OF 0.0069
                * CROSS SECTION IS A SMALL ROAD WITH A FENCE TO THE WEST
                * ALONG PINNACLE PEAK RD.
                * ROUTE FLOW TO CN25A (near NEW RIVER) FROM CN25B
                * DDM   ***** Preserved *****

1355            KK  RN25BW
1356            RS       4    FLOW       0
1357            RC    0.05    0.03     .05    2030  0.0069
1358            RX       0       1      14      15      35      36      51     551
1359            RY    9.25    1.25    0.25       0       0    0.25    1.25    3.25
                *
                *
                * DDM   ***** Preserved *****

1360            KK    N25A   BASIN
1361            KM   SUB-BASIN N25A
1362            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1363            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
1364            KM     L =  .59  Kb = .055  Adj. Slope =   47.0
1365            BA    .095
1366            LG    0.35    0.35    4.70    0.31       0
1367            UC   0.454   0.468
1368            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1369            UA     100
                *
                *
```

```
            * *** COMBINE  CN25A ************************************************************
            * COMBINE BASINS N25A AND RN25BW ALONG PINNACLE PEAK RD
            * PINNACLE PEAK RD. near NEW RIVER
            * DDM   ***** Preserved *****

1370        KK   CN25A
1371        HC       2
            *
            *
            * *** DIVERSION DN25A *************************************************************
            * DIVERSION WEST OF 67th AVE. InTO SUBDIVISION (SPLIT) / PINNACLE PEAK RD (MAIN)
            * DDM   ***** Preserved *****

1372        KK   DN25A
1373        DT   N25AI
1374        DI       0       1     118     236     355     473     591     709     827     945
1375        DQ       0      .4     102     158     236     315     394     473     552     630
            *
            *
            * DDM   ***** Preserved *****
1                                   HEC-1 INPUT                                          PAGE 57

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1376        KK     N25   BASIN
1377        KM   SUB-BASIN N25
1378        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1379        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
1380        KM     L = 1.08  Kb = .050  Adj. Slope =   31.0
1381        BA    .243
1382        LG    0.35    0.35    3.53    0.64       0
1383        UC   0.729   0.621
1384        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1385        UA     100
            *
            *
            * DDM   ***** Preserved *****

1386        KK    N25H   BASIN
1387        KM   SUB-BASIN N25H
1388        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1389        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
1390        KM     L =  .71  Kb = .057  Adj. Slope =   45.0
1391        BA    .068
1392        LG    0.35    0.35    4.35    0.40       0
1393        UC   0.446   0.531
1394        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
1395        UA     100
            *
            *
            * *** COMBINE  CN25 ***************************************************************
            * COMBINE BASINS N25, N25H, CN25A, AND RN25I
            * NEW RIVER at PINNACLE PEAK Alignment
            * AREA hardcoded TO prevent doubling OF some areas
            * DDM   ***** Preserved *****

1396        KK    CN25
1397        HC       4
            *
            *
            * *** ROUTE RN25 ******************************************************************
            * ROUTE RN25 IS 2939 FT WITH A SLOPE OF 0.0065
            * CROSS SECTION IS NEW RIVER (MEASURED)
            * ALONG NEW RIVER
            * ROUTE FLOW TO CN24 (WILLIAMS) FROM CN25 (PINNACLE PEAK)
            * DDM   ***** Preserved *****

1398        KK    RN25
1399        RS      11    FLOW       0
1400        RC    0.05     .06     .05    2939  0.0065
1401        RX       0     225     330     386     408     600     890    1110
1402        RY       8       8       4       2       1       4       2       8
            *
            *
```

```
* DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1403          KK    N24B   BASIN
1404          KM   SUB-BASIN N24B
1405          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1406          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
1407          KM     L =  .42  Kb = .057  Adj. Slope =   33.0
1408          BA    .069
1409          LG    0.30    0.27    4.80    0.30       7
1410          UC   0.342   0.258
1411          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1412          UA     100
              *
              *
              * *** DIVERSION RECOVER DRN25D  ***********************************************
              * RECOVER DIVERTED FLOW FROM  CN25D (PINNACLE PEAK AND 67th AVE)
              * DDM   ***** Preserved *****

1413          KK  DRN25D
1414          DR   N25DI
              *
              *
              * *** ROUTE RN25DS ************************************************************
              * ROUTE RN25DS  IS 2839 FT WITH A SLOPE OF 0.0053
              * CROSS SECTION IS A MEDIUM ROAD
              * ALONG 67th AVE AND Patrick lane
              * ROUTE FLOW TO CN24B Patrick ln FROM CN25D Pinacle Peak
              * DDM   ***** Preserved *****

1415          KK  RN25DS
1416          RS      11    FLOW       0
1417          RC    0.05    0.03    0.05    2839  0.0053
1418          RX       0     500     525     526     571     572     597    1097
1419          RY    3.75    0.75    0.25       0       0    0.25    0.75    3.75
              *
              *
              * *** COMBINE  CN24B **********************************************************
              * COMBINE BASINS N24B AND RN25DS
              * Patrick Ln WEST OF 67th AVE
              * added AREA at X3(0.55),N25E(0.20),N25D(0.07)  0.55 + 20 + 0.07 = 0.82
              * DDM   ***** Preserved *****

1420          KK   CN24B
1421          HC       2    0.27
              *
              *
              * *** ROUTE RN24B *************************************************************
              * ROUTE RN24B IS 1291 FT WITH A SLOPE OF 0.0058
              * CROSS SECTION IS A MEDIUM ROAD WITH FENCE ON BOTH SIDES (MEASURED)
              * ALONG Patrick Ln.
              * ROUTE FLOW TO CN24B*(71st AVE) FROM CN24B
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1422          KK   RN24B
1423          RS       3    FLOW       0
1424          RC    0.05     .03     .05    1291  0.0058
1425          RX       0       1      21      22      72      73      94      95
1426          RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
              *
              *
              * *** DIVERSION RECOVER DRN25C  ***********************************************
              * RECOVER DIVERTED FLOW FROM  CN25C (PINNACLE PEAK RD)
              * DDM   ***** Preserved *****

1427          KK  DRN25C
1428          DR   N25CI
              *
```

```
*
* *** ROUTE RN25CS ***********************************************************
* ROUTE RN25CS IS 1547 FT WITH A SLOPE OF 0.0052
* CROSS SECTION IS A SMALL ROAD WITH HOMES ON BOTH SIDES
*  ALONG local STREETS
* ROUTE FLOW TO CN24B*(Patrick Ln) FROM CN25C(PINNACLE PEAK)
* DDM   ***** Preserved *****

KK  RN25CS
RS       4    FLOW       0
RC    0.05    0.03     .05    1547  0.0052
RX       0       1    32.5    33.5    63.5    64.5      97      98
RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
*
*
* *** COMBINE CN24B*  ********************************************************
* COMBINE RN24B* AND RN25CS
* INTERSECTION OF 71st avenue AND Patrick Lane
* AREA hardcoded cn24B(0.82), n25c(0.17)  0.82 + 0.17 = 0.99
* DDM   ***** Preserved *****

KK  CN24B*
HC       2    0.64
*
*
* *** DIVERSION DN24B ********************************************************
* DIVERSION MAIN (WEST), SPLIT ALONG 71st AVE(SOUTH)
*
* ASSUMED THAT ALL FLOW IS WEST IN CHANNEL
*
* DDM   ***** Preserved *****

KK  DN24B*
DT   N24BI
DI       0       1     200     300     400     500     600     700    1000    2000
DQ       0      .1      .2      .3      .4      .5      .6      .7      .8      .9
*
*
* *** ROUTE RN24BW ***********************************************************
* ROUTE RN24BW IS 1203 FT WITH A SLOPE OF 0.0083
* CROSS SECTION IS A SMALL ROAD WITH HOMES ON BOTH SIDES
* ALONG CHANNEL
* ROUTE FLOW TO CN24B*  FROM CN24B* (71st AVE)
* DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  RN24BW
RS       2    FLOW       0
RC    0.05    0.03    0.05    1203  0.0083
RX       0       1      21      22      72      73      94      95
RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
*
*
* *** DIVERSION RECOVER DRN25B  **********************************************
* RECOVER DIVERTED FLOW FROM  CN25B PINNACLE PEAK
* DDM   ***** Preserved *****

KK  DRN25B
DR   N25BI
*
*
* *** ROUTE RN25BS ***********************************************************
* ROUTE RN25BS IS 2410 FT WITH A SLOPE OF 0.005
* CROSS SECTION IS AN INVERTED CROWN SUBDIVISION ROAD (MEASURED)
* ALONG local STREETS
* *** ROUTE FLOW TO CN24C* (Patrick ln) FROM CN25B (PINNACLE PEAK RD.)
* DDM   ***** Preserved *****

KK  RN25BS
RS       2    FLOW      -1
RC    0.04    0.03    0.04    2410   0.005
RX       0       1      36      51      61      76     110     111
```

```
1451        RY     9.5     1.5     0.5       0       0     0.5     1.5     9.5
            *
            *
            * *** COMBINE CN24C*   ********************************************************
            * *** COMBINE  RN24BW AND RN25BS ******************************
            * AREA hardcoded cn24b*(0.64),cn25b(1.45) 0.64 + 1.45 = 2.09
            * DDM   ***** Preserved *****

1452        KK  CN24C*
1453        HC       2    2.09
            *
            *
            * *** ROUTE RN24C*   ********************************************************
            * ROUTE RN24C* IS 1188 FT WITH A SLOPE OF 0.0051
            * CROSS SECTION IS A MAN-MADE CANAL (MEASURED)
            * ALONG Canal
            * ROUTE FLOW TO CN24C FROM CN24C*
            * DDM   ***** Preserved *****

1454        KK  RN24C*
1455        RS       1    FLOW       0
1456        RC    0.03    0.03    0.03    1188  0.0051
1457        RX       0       1       5       9      19      23      33      34
1458        RY      12       4       4       0       0       4       4      12
            *
            *
            * *** DIVERSION RECOVER DRN25A  ************************************************
            * RECOVER DIVERTED FLOW FROM  CN25A
            * DDM   ***** Preserved *****
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1459        KK  DRN25A
1460        DR   N25AI
            *
            *
            * *** ROUTE RN25AS ***********************************************************
            * ROUTE RN25AS IS 1409 FT WITH A SLOPE OF 0.0057
            * CROSS SECTION IS A SUBDIVISION ROAD WITH HOMES ON BOTH SIDES
            * ALONG local STREETS
            * ROUTE FLOW TO CN24C FROM CN25A
            * DDM   ***** Preserved *****

1461        KK  RN25AS
1462        RS       2    FLOW      -1
1463        RC    0.04    0.03    0.04    1409   .0057
1464        RX       0       1      37      38      69      70     106     107
1465        RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
            *
            *
            * DDM   ***** Updated *****

1466        KK    N24C   BASIN
1467        KM   SUB-BASIN N24C
1468        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1469        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
1470        KM     L =  .96  Kb = .052  Adj. Slope =   33.0
1471        BA    .186
1472        LG    0.25    0.25    4.40    0.45      29
1473        UC   0.363   0.186
1474        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1475        UA     100
            *
            *
            * *** COMBINE  CN24C ********************************************************
            * *** COMBINE BASIN N24C, RN24C* AND  RN25AS ***********************************
            * AREA hardcoded cn24c*(1.10),n25a(0.09),n24c(0.09)  1.10 + 0.09 + 0.09 = 1.38
            * DDM   ***** Preserved *****

1476        KK   CN24C
1477        HC       3    3.73
            *
            *
```

```
* *** ROUTE RN24C ************************************************************
* ROUTE RN24C IS 1954 FT WITH A SLOPE OF 0.0061
* CROSS SECTION IS A MAN-MADE CHANNEL (MEASURED)
* ALONG CHANNEL
* ROUTE FLOW TO CN24 (NEW RIVER) FROM CN24C
* DDM   ***** Preserved *****

KK   RN24C
RS       2    FLOW       0
RC    0.04    0.03    0.04    1954  0.0061
RX       0     100     101     105     115     119     200     300
RY       6       4       4       0       0       4       6       7
*
*
* DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK     N24   BASIN
KM   SUB-BASIN N24
KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
KM     L =  .35  Kb = .054  Adj. Slope =   51.0
BA    .108
LG    0.33    0.34    3.45    0.69       6
UC   0.400   0.295
UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
UA     100
*
*
* DDM   ***** Preserved *****

KK    N24A   BASIN
KM   SUB-BASIN N24A
KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
KM     L = 1.10  Kb = .038  Adj. Slope =   35.0
BA    .240
LG    0.18    0.27    4.80    0.35      33
UC   0.492   0.410
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*
*
* *** STORAGE ROUTING LN24A ***********************************************
* *** SMALL SUBDIVISION STORAGE (ACCOUNTED) ******************************
* DDM   ***** Preserved *****

KK   LN24A
DT  LN24AD     8.3
DI       0     100    1000   10000
DQ       0     100    1000   10000
*
*
* *** DIVERSION RECOVER DRN24B  ***************************************************
* RECOVER DIVERTED FLOW FROM  CN24B (Patrick Ln)
* DDM   ***** Preserved *****

KK  DRN24B
DR   N24BI
*
*
* *** ROUTE RN24BS ************************************************************
* ROUTE RN24BS IS 1314 FT WITH A SLOPE OF 0.0061
* CROSS SECTION IS A MEDIUM ROAD WITH A FENCE ON THE EAST SIDE (MEASURED)
* ALONG 71st AVE
* ROUTE FLOW TO CX30 (WILLIAMS) FROM CN24B (Patrick Ln)
* DDM   ***** Preserved *****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
1509        KK  RN24BS
1510        RS       1    FLOW       0
1511        RC    0.04    0.03    0.04    1314  0.0061
1512        RX       0     293     359     360     405     406     419     420
1513        RY    4.25    1.25    0.25       0       0    0.25    1.25    9.25
            *
            *
            * DDM   ***** Preserved *****

1514        KK    A21A   BASIN
1515        KM   SUB-BASIN A21A
1516        KM   24-HOUR RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1517        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1518        KM     L = .58  Kb = .029  Adj. Slope = 302.1
1519        BA    .083
1520        LG    0.15    0.35    4.60    0.33      38
1521        UC    .158    .128
1522        UA       0       3       5       8      12      20      43      75      90      96
1523        UA     100
            *
            *
            * *** ROUTE RA21A ***************************************************************
            * ROUTE RA21AW IS 1805 FT WITH APPROX. SLOPE OF 0.0045 (MEASURED FROM 1996 TOPO)
            * CROSS SECTION IS A TRAPAZOIDAL CHANNEL SECTION  WITH A FENCE ON THE SOUTH SIDE
            * ALONG WILLIAMS DR. ALIGNMENT.
            * ROUTE FLOW TO CX30 (WILLIAMS & 71ST AVE.) FROM A21A (36" PIPE UNDER 67TH AVE.)
            * DDM   ***** Preserved *****

1524        KK   RA21A
1525        RS       3    FLOW       0
1526        RC    0.04     .04    0.04    1805   .0045
1527        RX       0     290     335     360     365     390     450     520
1528        RY       6       5       4       0       0       4       5       6
            *
            *
            * *** COMBINE  CX30 *************************************************************
            * COMBINE A21A, AND RN24BS
            * DDM   ***** Preserved *****

1529        KK     X30
1530        HC       2
            *
            *
            * *** DIVERSION DX30 *************************************************************
            * DIVERSION MAIN (WEST), SPLIT (SOUTH)
            *
            * DDM   ***** Preserved *****

1531        KK    DX30
1532        DT    X30I
1533        DI       0       1      30      60     100     300     782     885    1066    1498
1534        DQ       0       1      29      28      28      28      28      28      99     286
            *
            *
            * *** ROUTE RX30W ****************************************************************
            * ROUTE RX30W IS 2598 FT WITH A SLOPE OF 0.005
            * CROSS SECTION IS A MAN-MADE CHANNEL (MEASURED)
            * ALONG WILLIAMS Alignment
            * ROUTE FLOW TO CN24 (NEW RIVER) FROM CX30(71st AVE)
            * DDM   ***** Preserved *****
                                        HEC-1 INPUT                                    PAGE 64

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1535        KK   RX30W
1536        KO       3
1537        RS       1    FLOW       0
1538        RC    0.04    0.04    0.04    2598   0.005
1539        RX       0       1       8      21      29      42      56     256
1540        RY      12       4       4       0       0       4       5       6
            *
            *
            * *** COMBINE  CN24 *************************************************************
            * COMBINE CN24D, RN25, RN24C, N24, N24A, AND CX30
```

```
                * NEW RIVER at WILLIAMS RD Alignment
                * AREA hardcoded TO prevent doubling
                * DDM   ***** Preserved *****

1541            KK    CN24
1542            HC       6   10.60
                *
                *
                * *** ROUTE RN24 ***************************************************************
                * ROUTE RN24 IS 2795 FT WITH A SLOPE OF 0.0043
                * CROSS SECTION IS NEW RIVER (MEASURED)
                * ALONG NEW RIVER
                * ROUTE FLOW TO CN23 (DEER VALLEY RD) FROM CN24 (WILLIAMS)
                * DDM   ***** Preserved *****

1543            KK    RN24
1544            RS       8    FLOW       0
1545            RC    0.05    0.05     .05    2795  0.0043
1546            RX       0     271     355     500     700     712     776     873
1547            RY      11       8       0       0       0       6       6       8
                *
                *
                * *** DIVERSION RECOVER DRX30  ************************************************
                * RECOVER DIVERTED FLOW FROM  CX30
                * DDM   ***** Preserved *****

1548            KK   DRX30
1549            DR    X30I
                *
                *
                * *** ROUTE RX30S ***************************************************************
                * ROUTE RX30S IS 2790 FT WITH A SLOPE OF 0.005
                * CROSS SECTION IS A MEDIUM ROAD WITH FENCE TO LEFT SIDE
                * ALONG DEER VALLEY RD
                * ROUTE FLOW TO CN23A (NEW RIVER) FROM CX30
                * DDM   ***** Preserved *****

1550            KK   RX30S
1551            RS       1    FLOW       0
1552            RC    0.04    0.03    0.04    2790   0.005
1553            RX       0       1      26      27      54      55     137     312
1554            RY    9.25    1.25    0.25       0       0    0.25    1.25    3.25
                *
                *
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE 65

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1555            KK    N23A   BASIN
1556            KM   SUB-BASIN N23A
1557            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
1558            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .994
1559            KM     L =  .84  Kb = .044  Adj. Slope =   30.0
1560            BA    .485
1561            LG    0.23    0.26    4.90    0.34      31
1562            UC   0.450   0.200
1563            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1564            UA     100
                *
                *
                * *** STORAGE ROUTING LN23A ****************************************************
                * *** HILLCREST RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ****************
                * DDM   ***** Preserved *****

1565            KK   LN23A
1566            DT  LN23AD    13.4
1567            DI       0     100    1000   10000
1568            DQ       0     100    1000   10000
                *
                *
                * *** COMBINE  CN23A ************************************************************
                * COMBINE BASIN N23A AND RX30S
                * DEER VALLEY RD WEST OF 67th AVE.
```

```
* AREA hardcoded  added CN24B*(0.99),N24A(0.09),N23A(0.49) =1.57
* DDM   ***** Preserved *****

KK   CN23A
HC       2    1.13
*
*
* *** DIVERSION N23A ***********************************************************
* DIVERSION MAIN DEER VALLEY(WEST), SPLIT Arrohead Ranch(SOUTH)
*
*
* DDM   ***** Preserved *****

KK   DN23A
DT   N23AI
DI       0       1      92     274     365     456     546     700     800    1000
DQ       0     .01      26      70      87     109     131     167     191     239
*
*
* *** ROUTE RN23AW *************************************************************
* ROUTE RN23AW IS 3230 FT WITH A SLOPE OF 0.0056
* CROSS SECTION IS A LARGE ROAD WITH FENCE ON BOTH SIDES
* ALONG DEER VALLEY RD.
* ROUTE FLOW TO WEST OF (75th AVE) CN23 FROM CN23A
* DDM   ***** Preserved *****
```



```
LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  RN23AW
RS       7    FLOW       0
RC    0.04    0.03    0.04    3230   .0056
RX       0       1      34      35      97      98     123     124
RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
*
*
* DDM   ***** Preserved *****

KK     N23   BASIN
KM   SUB-BASIN N23
KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
KM     L =  .88  Kb = .039  Adj. Slope =   25.0
BA    .389
LG    0.20    0.29    4.25    0.43      10
UC   0.837   0.508
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*
*
* *** DIVERSION RECOVER DRN21D ***********************************************
* RECOVER DIVERTED FLOW FROM  83RD AVE (CN21D)
* DDM   ***** Preserved *****

KK  DRN21D
DR   N21DI
*
*
* *** ROUTE RN21DE *************************************************************
* ROUTE RN21DE IS 4696 FT WITH A SLOPE OF 0.0013
* CROSS SECTION IS A SMALL ROAD WITH AN ORCHARD ON THE WEST SIDE (MEASURED)
* ALONG DEER VALLEY RD.
* *** ROUTE FLOW TO WEST OF 75 AVE (CN23) FROM 83RD AVE. (CN21D)
* DDM   ***** Preserved *****

KK  RN21DE
RS      17    FLOW       0
RC    0.06    0.03    0.04    4696  0.0013
RX       0     200     262     274     275     300     301     327
RY    4.25    2.25    1.25    0.25       0       0    0.25    4.25
*
*
* *** COMBINE  CN23 ************************************************************
* COMBINE BASIN N23, RN21DE, RN24, AND RN23AW
```

```
                * DEER VALLEY RD WEST OF 75th AVE.
                * AREA hardcoded added CN24(9.69),CN21D(2.17),N23(0.39) = 12.25
                * DDM   ***** Preserved *****
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1597            KK    CN23
1598            HC       4   13.72
                *
                *
                * *** ROUTE RN23 ***************************************************************
                * ROUTE RN23 IS 6182 FT WITH A SLOPE OF 0.0055
                * CROSS SECTION IS NEW RIVER (MEASURED)
                * ALONG NEW RIVER
                * ROUTE FLOW TO BEARDSLEY RD (CN21) FROM DEER VALLEY (CN23)
                * DDM   ***** Preserved *****

1599            KK    RN23
1600            RS      13    FLOW       0
1601            RC    0.05    0.04    0.05    6182  0.0055
1602            RX       0     318     358     443     649     699     817     843
1603            RY      22      20       6       0       0       8      10      18
                *
                *
                * DDM   ***** Updated *****

1604            KK    A21C   BASIN
1605            KM   SUB-BASIN A21C
1606            KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
1607            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1608            KM     L = .51  Kb = .050  Adj. Slope = 90.0
1609            BA    .054
1610            LG    0.22    0.23    4.30    0.56      36
1611            UC    .158    .147
1612            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1613            UA     100
                *
                *

1614            KK  A21CRR
1615            KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #6) IN SUB-BASIN A21C.
1616            KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
1617            KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
1618            KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
1619            KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
1620            RS       1    ELEV    1304
1621            SV       0    1.42    2.89    4.42    6.00    7.64    9.34   11.08   12.85
1622            SE    1304  1304.5    1305  1305.5    1306  1306.5    1307  1307.5    1308
1623            SQ       0      19      60     119     187     262     345     435     531
                *
                *
                * *** ROUTE RA21C **************************************************************
                * ROUTE RA21C IS 900 FT WITH APPROX. SLOPE OF .0100 (MEASURED FROM 1996 TOPO)
                * CROSS SECTION IS EXISTING TRAPAZOIDAL CREEK THROUGH A GOLF COURSE
                * BETWEEN LAKE #6 AND LAKE #8.
                *
                * ROUTE FLOW TO CA21K FROM BASIN A21C
                * DDM   ***** Preserved *****
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1624            KK   RA21C
1625            RS       1    FLOW       0
1626            RC    .035    .035    .035     900     .01
1627            RX       0     350     388     400     405     417     450     600
1628            RY       6       5       4       0       0       4       5       6
                *
                *
                *
                *
                * DDM   ***** Updated *****
```

```
1629          KK    A21D   BASIN
1630          KM   SUB-BASIN A21D
1631          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
1632          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1633          KM     L = .19  Kb = .033  Adj. Slope = 315.0
1634          BA    .019
1635          LG    0.15    0.35    3.95    0.47      65
1636          UC    .108    .079
1637          UA       0       3       5       8      12      20      43      75      90      96
1638          UA     100
              *
              *
              * *** ROUTE RA21D ***************************************************************
              * ROUTE RA21D IS 950 FT WITH APPROX. SLOPE OF .0075 (MEASURED FROM 1996 TOPO)
              * CROSS SECTION IS THROUGH A TYPICAL LOCAL STREET.
              *
              * ROUTE FLOW TO CA21E FROM BASIN A21D
              * DDM   ***** Preserved *****

1639          KK   RA21D
1640          KO       3
1641          RS       2    FLOW       0
1642          RC    .030    .018    .030     950   .0075
1643          RX     100     100   107.5   107.5   142.5   142.5     150     150
1644          RY     3.5       1     .25       0       0     .25       1     3.5
              *
              *
              * DDM   ***** Updated *****

1645          KK    A21E   BASIN
1646          KM   SUB-BASIN A21E
1647          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
1648          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1649          KM     L = .32  Kb = .053  Adj. Slope = 150.0
1650          BA    .058
1651          LG    0.23    0.23    4.45    0.47      56
1652          UC    .104    .061
1653          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1654          UA     100
              *
              *
              * *** COMBINE  CA21E ************************************************************
              * COMBINE  RA21D AND BASIN A21E
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1655          KK   CA21E
1656          HC       2
              *
              *

1657          KK  A21ERR
1658          KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #7) IN SUB-BASIN A21E.
1659          KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
1660          KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
1661          KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
1662          KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
1663          RS       1    ELEV  1301.5
1664          SV       0    1.55    3.17    4.87    6.62    8.40   10.19   11.97   13.75
1665          SE  1301.5    1302  1302.5    1303  1303.5    1304  1304.5    1305  1305.5
1666          SQ       0      67     210     417     653     916    1207    1521    1859
              *
              *
              * *** DIVERSION  DA21E *********************************************************
              * DIVERSION OF LAKE #7: 70% MAIN SOUTH TO LAKE #8 (RA21ES),
              * 30% SPLIT WEST TO LAKE #11 (DA21EW).
              * DDM   ***** Preserved *****

1667          KK   DA21E
1668          DT   A21EI
1669          DI       1      78     100     200     500    1000    5000   10000
```

```
1670        DQ     0.1      23      30      60     150     300    1500    3000
            *
            *
            * *** ROUTE RA21ES ************************************************************
            * ROUTE RA21ES IS 850 FT WITH APPROX. SLOPE OF .0045 (MEASURED FROM 1996 TOPO)
            * CROSS SECTION IS EXISTING TRAPAZOIDAL CREEK
            * ALONG WEST SIDE OF ARROWHEAD LOOP RD.
            *
            * ROUTE FLOW TO CA21K FROM DIVERT DA21E
            * DDM   ***** Preserved *****

1671        KK  RA21ES
1672        RS       2    FLOW       0
1673        RC    .030     .03    .030     850   .0045
1674        RX       0     125     175     200     205     225     275     500
1675        RY       6       5       4       0       0       4       5       6
            *
            *
            * DDM   ***** Updated *****

1676        KK    A21K   BASIN
1677        KM   SUB-BASIN A21K
1678        KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
1679        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1680        KM     L = .35  Kb = .050  Adj. Slope = 31.0
1681        BA    .068
1682        LG    0.22    0.23    4.50    0.48      37
1683        UC    .175    .107
1684        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1685        UA     100
            *
            *
            * *** COMBINE  CA21K ***********************************************************
            * COMBINE  RA21C, RA21ES AND BASIN A21K
            * DDM   ***** Preserved *****

1686        KK   CA21K
1687        HC       3    0.20
            *
            *

1688        KK  A21KRR
1689        KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #8) IN SUB-BASIN A21K.
1690        KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
1691        KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY). IN ADDITION,
1692        KM   THE CHANNEL BETWEEN LAKE #8 & LAKE #9 IS THE CONTROLLING FACTOR.
1693        KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
1694        KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
1695        RS       1    ELEV  1289.5
1696        SV       0    1.20    2.43    3.70    4.99    6.32    7.66    9.03   10.40
1697        SE  1289.5    1290  1290.5    1291  1291.5    1292  1292.5    1293  1293.5
1698        SQ       0      41     145     317     514     884    1457    2132    2899
            *
            *
            * DDM   ***** Updated *****

1699        KK    A21L   BASIN
1700        KM   SUB-BASIN A21L
1701        KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
1702        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1703        KM     L = .36  Kb = .058  Adj. Slope = 25.0
1704        BA    .028
1705        LG    0.23    0.24    4.70    0.39      39
1706        UC    .213    .225
1707        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1708        UA     100
            *
            *
            * *** COMBINE  CA21L ***********************************************************
            * COMBINE A21KRR AND BASIN A21L
            * DDM   ***** Preserved *****
```

```
1709          KK   CA21L
1710          HC       2    0.23
              *
              *

1711          KK  A21LRR
1712          KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #9) IN SUB-BASIN A21L.
1713          KM   EXISTING WATER SURFACE ELEVATION WAS MEASURED BY PENTACORE.
1714          KM   LAKE OUTFALL VIA 2 CONCRETE BOX CULVERTS (4'x3' & 6'x3').
1715          KM   ASSUME CULVERTS ARE THE CONTROLLING FACTOR AND INVERT WAS ESTIMATED.
1716          KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
1717          RS       1    ELEV  1286.5
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1718          SV       0    0.42    0.88    1.35    1.83    2.33    2.84    3.35    3.86
1719          SE  1286.5    1287  1287.5    1288  1288.5    1289  1289.5    1290  1290.5
1720          SQ      74     103     134     164     194     219     241     264     286
              *
              *
              * *** ROUTE RA21L ***************************************************************
              * ROUTE RA21L IS 1225 FT WITH APPROX. SLOPE OF .0050 (MEASURED FROM 1996 TOPO)
              * CROSS SECTION IS EXISTING TRAPAZOIDAL CREEK
              * ALONG WEST SIDE OF ARROWHEAD LOOP RD.
              *
              * ROUTE FLOW TO CA21O FROM A21LRR
              * DDM   ***** Preserved *****

1721          KK   RA21L
1722          RS       2    FLOW       0
1723          RC    .030     .03    .030    1225    .005
1724          RX       0     125     175     200     205     225     275     500
1725          RY       6       5       4       0       0       4       5       6
              *
              *
              * DDM   ***** Updated *****

1726          KK    A21M   BASIN
1727          KM   SUB-BASIN A21M
1728          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
1729          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1730          KM     L = .41  Kb = .064  Adj. Slope = 7.0
1731          BA    .016
1732          LG   0.23    0.23    4.70    0.38      44
1733          UC    .392   0.677
1734          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1735          UA     100
              *
              *

1736          KK  A21MRR
1737          KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #10) IN SUB-BASIN A21M.
1738          KM   ASSUME LAKE OUTFALL BY OVERTOPPING ADJACENT ROADWAY ON WEST.
1739          KM   EXISTING WATER SURFACE AND STREET ELEVATIONS WERE REFERENCE FROM
1740          KM   THE 1996 FCD TOPO FILE.
1741          KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
1742          KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
1743          RS       1    ELEV  1284.5
1744          SV       0    0.38    0.79    1.23    1.69    2.18    2.68    3.18    3.70
1745          SE  1284.5    1285  1285.5    1286  1286.5    1287  1287.5    1288  1288.5
1746          SQ       0       0       0       0       0       0      53     153     284
              *
              *
              * *** ROUTE RA21M ***************************************************************
              * ROUTE RA21M IS 950 FT WITH APPROX. SLOPE OF .0045 (MEASURED FROM 1996 TOPO)
              * CROSS SECTION IS THROUGH A TYPICAL COLLECTOR STREET.
              *
              * ROUTE FLOW TO CA21O FROM A21MRR
              * DDM   ***** Preserved *****
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
1747          KK   RA21M
1748          KO       3
1749          RS       1    FLOW      -1
1750          RC    .030    .018    .030     950   .0045
1751          RX     100     100   110.5   110.5   149.5   149.5     160     160
1752          RY     3.5       1     .25       0       0     .25       1     3.5
              *
              *
              * *** DIVERSION RECOVER DA21EW  ***********************************************
              * RECOVER WEST DIVERT FLOW FROM BASIN A21E (DA21E)
              * DDM   ***** Preserved *****

1753          KK  DA21EW
1754          DR   A21EI
              *
              *
              * DDM   ***** Updated *****

1755          KK    A21F   BASIN
1756          KM   SUB-BASIN A21F
1757          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
1758          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1759          KM     L = .30  Kb = .031  Adj. Slope = 315.0
1760          BA    .046
1761          LG    0.15    0.35    3.95    0.47      65
1762          UC    .121    .078
1763          UA       0       3       5       8      12      20      43      75      90      96
1764          UA     100
              *
              *
              * *** ROUTE RA21F ***************************************************************
              * ROUTE RA21F IS 550 FT WITH APPROX. SLOPE OF .0450 (MEASURED FROM 1996 TOPO)
              * CROSS SECTION IS THROUGH A TYPICAL LOCAL STREET.
              *
              * ROUTE FLOW TO CA21G FROM BASIN A21F
              * DDM   ***** Preserved *****

1765          KK   RA21F
1766          KO       3
1767          RS       1    FLOW       0
1768          RC    .030    .018    .030     550   .0450
1769          RX     100     100   107.5   107.5   142.5   142.5     150     150
1770          RY     3.5       1     .25       0       0     .25       1     3.5
              *
              *
              * *** ROUTE RA21F ***************************************************************
              * ROUTE RA21F IS 550 FT WITH APPROX. SLOPE OF .0220 (MEASURED FROM 1996 TOPO)
              * CROSS SECTION IS THROUGH A TYPICAL GOLF COURSE SECTION.
              *
              * ROUTE FLOW TO CA21G FROM BASIN A21F
              * DDM   ***** Preserved *****
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1771          KK   RA21F
1772          KO       3
1773          RS       1    FLOW       0
1774          RC    .030     .03    .030     550    .022
1775          RX       0     100     180     300     306     426     500     600
1776          RY       6       5       4       0       0       4       5       6
              *
              *
              * DDM   ***** Updated *****

1777          KK    A21G   BASIN
1778          KM   SUB-BASIN A21G
1779          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
1780          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1781          KM     L = .38  Kb = .049  Adj. Slope = 132.0
1782          BA    .041
1783          LG    0.23    0.24    5.10    0.37      53
1784          UC    .121    .101
```

```
1785        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1786        UA     100
            *
            *
            * *** COMBINE  CA21G ************************************************************
            * COMBINE DA21EW, RA21F AND BASIN A21G
            * DDM   ***** Preserved *****

1787        KK   CA21G
1788        HC       3    0.16
            *
            *

1789        KK  A21GRR
1790        KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #11) IN SUB-BASIN A21G.
1791        KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
1792        KM   ELEVATION PER CITY OF GLENDALE (FCD 1996 TOPO FILE).
1793        KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
1794        KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
1795        RS       1    ELEV    1297
1796        SV       0    0.43    0.90    1.39    1.91    2.45    3.01    3.57    4.13
1797        SE    1297  1297.5    1298  1298.5    1299  1299.5    1300  1300.5    1301
1798        SQ       0      19      60     119     187     262     345     435     531
            *
            *
            * DDM   ***** Updated *****

1799        KK    A21H   BASIN
1800        KM   SUB-BASIN A21H
1801        KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
1802        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1803        KM     L = .12  Kb = .062  Adj. Slope = 67.0
1804        BA    .007
1805        LG    0.19    0.13    6.80    0.16      55
1806        UC    .100    .089
1807        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1808        UA     100
            *
            *
            * *** COMBINE  CA21H ************************************************************
            * COMBINE A21GRR AND BASIN A21H
            * DDM   ***** Preserved *****

1809        KK   CA21H    0.17
1810        HC       2
            *
            *

1811        KK  A21HRR
1812        KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #12) IN SUB-BASIN A21H.
1813        KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
1814        KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
1815        KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
1816        KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
1817        RS       1    ELEV    1295
1818        SV       0    0.69    1.42    2.18    2.96    3.73    4.51    5.28    6.06
1819        SE    1295  1295.5    1296  1296.5    1297  1297.5    1298  1298.5    1299
1820        SQ       0      19      60     119     187     262     345     435     531
            *
            *
            * DDM   ***** Updated *****

1821        KK    A21I   BASIN
1822        KM   SUB-BASIN A21I
1823        KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
1824        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1825        KM     L = .37  Kb = .031  Adj. Slope = 315.0
1826        BA    .037
1827        LG    0.15    0.35    4.45    0.36      44
1828        UC    .117    .076
1829        UA       0       3       5       8      12      20      43      75      90      96
```

```
1830        UA     100
            *
            *
            * *** ROUTE RA21I ***********************************************************
            * ROUTE RA21I IS 1910 FT WITH APPROX. SLOPE OF .0085 (MEASURED FROM 1996 TOPO)
            * CROSS SECTION IS THROUGH A TYPICAL LOCAL STREET
            * WITH A VALLEY GUTTER AT ROAD CENTERLINE.
            *
            * ROUTE FLOW TO CA21J FROM BASIN A21I
            * DDM   ***** Preserved *****

1831        KK   RA21I
1832        KO       3
1833        RS       3    FLOW       0
1834        RC    .030    .018    .030    1910   .0085
1835        RX     100     100   107.5   107.5   142.5   142.5     150     150
1836        RY     3.5       1     .25       0       0     .25       1     3.5
            *
            *
            * DDM   ***** Updated *****
1                                   HEC-1 INPUT                                          PAGE 75

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1837        KK    A21J   BASIN
1838        KM   SUB-BASIN A21J
1839        KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
1840        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1841        KM     L = .50  Kb = .051  Adj. Slope = 36.0
1842        BA    .112
1843        LG    0.24    0.25    4.90    0.37      46
1844        UC    .183    .112
1845        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1846        UA     100
            *
            *
            * *** COMBINE  CA21J ********************************************************
            * COMBINE A21HRR, RA21I AND BASIN A21J
            * DDM   ***** Preserved *****

1847        KK   CA21J
1848        HC       3    0.32
            *
            *

1849        KK  A21JRR
1850        KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #13) IN SUB-BASIN A21J.
1851        KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
1852        KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
1853        KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
1854        KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
1855        RS       1    ELEV  1289.5
1856        SV       0    0.40    0.83    1.29    1.78    2.29    2.81    3.34    3.88
1857        SE  1289.5    1290  1290.5    1291  1291.5    1292  1292.5    1293  1293.5
1858        SQ       0      24      75     149     233     327     431     544     664
            *
            *
            * *** ROUTE RA21J ***********************************************************
            * ROUTE RA21J IS 1325 FT WITH APPROX. SLOPE OF .0075 (MEASURED FROM 1996 TOPO)
            * CROSS SECTION IS EXISTING TRAPAZOIDAL CREEK AND GOLF COURSE
            * BETWEEN LAKE #13 AND LAKE #14
            *
            * ROUTE FLOW TO CA21N FROM A21JRR
            * DDM   ***** Preserved *****

1859        KK   RA21J
1860        KO       3
1861        RS       2    FLOW       0
1862        RC    .030     .03    .030    1325   .0075
1863        RX       0     100     180     300     306     426     500     600
1864        RY       8       6       4       0       0       4       6       8
            *
            *
            * DDM   ***** Updated *****
```

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1865          KK    A21N   BASIN
1866          KM   SUB-BASIN A21N
1867          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
1868          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1869          KM     L = .71  Kb = .043  Adj. Slope = 28.0
1870          BA    .258
1871          LG    0.23    0.24    4.65    0.44      33
1872          UC    .208    .107
1873          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1874          UA     100
              *
              *
              * *** COMBINE  CA21N ************************************************************
              * COMBINE RA21L, RA21M, RA21J AND BASIN A21N
              * DDM   ***** Preserved *****

1875          KK   CA21N
1876          HC       4    0.75
              *
              *

1877          KK  A21NRR
1878          KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #14) IN SUB-BASIN A21N.
1879          KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
1880          KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
1881          KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
1882          KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
1883          RS       1    ELEV    1277
1884          SV       0    2.93    5.97    9.12   12.39   15.76   19.19   22.67   26.20    26.3
1885          SE    1277  1277.5    1278  1278.5    1279  1279.5    1280  1280.5    1281    1282
1886          SQ       0      24      75     149     233     327     431     544     664    1400
              *
              *
              * DDM   ***** Updated *****

1887          KK    A21O   BASIN
1888          KM   SUB-BASIN A21O
1889          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
1890          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
1891          KM     L = .16  Kb = .035  Adj. Slope = 12.0
1892          BA    .011
1893          LG    0.08    0.19    4.80    0.42      76
1894          UC    .150    .136
1895          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1896          UA     100
              *
              *
              * *** COMBINE  CA21O ************************************************************
              * COMBINE A21NRR AND BASIN A21O
              * DDM   ***** Preserved *****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1897          KK   CA21O
1898          HC       2    0.76
              *
              *

1899          KK  A21ORR
1900          KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #15) IN SUB-BASIN A21O.
1901          KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
1902          KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
1903          KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
1904          KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
1905          RS       1    ELEV  1272.5
1906          SV       0    0.76    1.55    2.36    3.19    4.05    4.91    5.80    6.69
1907          SE  1272.5    1273  1273.5    1274  1274.5    1275  1275.5    1276  1276.5
1908          SQ       0      44     134     268     420     589     776     978    1195
```

```
*
*
* DDM   ***** Updated *****

KK    A21U   BASIN
KM   SUB-BASIN A21U
KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
KM     L = .62  Kb = .045  Adj. Slope = 16.0
BA    .145
LG    0.22    0.23    4.70    0.42      34
UC    .258    .169
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*
*
* *** STORAGE LA21U ************************************************************
* APPROX. 17.3 ACRES FROM ARROWHEAD RANCH PARCEL 8
* RETAINED FOR THE 100-YR, 2-HR STORM EVENT.
* REQUIRED VOLUME = 2 AC.-FT.
* DDM   ***** Updated *****

KK   LA21U
DT   A21UR       2
DI       0   10000
DQ       0   10000
*
*
* *** COMBINE  CA21U ***********************************************************
* COMBINE A21ORR AND BASIN A21U (LA21U)
* DDM   ***** Preserved *****

KK   CA21U
HC       2    0.90
*
*
```

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  A21URR
KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #16) IN SUB-BASIN A21U.
KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
KM   NOTE: WEIR CREST IS APPROX. 2-3 FT ABOVE THE EXISTING WATER SURFACE IN LAKE.
KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
KO       3       2
RS       1    ELEV  1267.5
SV       0    3.75    7.54   11.36   15.21   19.08   22.97   26.89   30.84   34.81
SV   38.81
SE  1267.5    1268  1268.5    1269  1269.5    1270  1270.5    1271  1271.5    1272
SE  1272.5
SQ       9      25      84     159     229     310     380     449     504     550
SQ     596
*
*
* *** DIVERSION  DA21U *********************************************************
* DIVERSION OF LAKE #16: MAIN WEST TO LAKE WEST OF 67TH AVE.
* SPLIT SOUTH TO BEARDSLEY RD. VIA LAKE'S EMERGENCY STORM DRAIN ON 67TH AVE.
* ASSUME FLOW IN 24" PVC S.D. IS FULL AT A APPROX. SLOPE OF 0.0025 = 15 CFS.
* CONSERVATIVE: DIVERTED FLOW AFTER STORAGE ROUTING.
* DDM   ***** Updated *****

KK   DA21U
DT  DA21US
DI       0      15     100     500    1000    5000
DQ       0      15      15      15      15      15
*
*

KK  N21A36   BASIN
BA    .016
LG    0.25    0.35    2.65    1.40      30
UC   0.317   0.336
```

```
1947          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1948          UA     100
              *
              *

1949          KK  N21AP3   BASIN
1950          KO       3       2
1951          BA    .009
1952          LG    0.16    0.35    2.65    1.31      52
1953          UC   0.346   0.517
1954          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1955          UA     100
              *
              *
              * DDM   ***** Preserved *****
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1956          KK  C21AP3
1957          HC       3
              *
              * *** STORAGE L21AP3 ************************************************************
              *
              * ASSUMED A 110' WEIR- 1' WIDE (REPORT)
              * WEIR ELEVATION IS 1267.5' (SURVEY) WSEL = 1267.5' (SURVEY)
              * WEIR COEFF = 3.11
              *

1958          KK  L21AP3
1959          KO       3       0       0       0      21
1960          RS       1    STOR       0
1961          SQ       0     121     629    1352
1962          SE  1267.5    1268    1269    1270
1963          SV       0    1.05    3.23    5.55
1964          SE  1267.5    1268    1269    1270
              *
              *

1965          KK  N21A25   BASIN
1966          BA    .004
1967          LG    0.10    0.35    2.65    1.70      80
1968          UC   0.121   0.151
1969          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1970          UA     100
              *
              *
              * *** ROUTE R21A25 **************************************************************
              * ROUTE R21A25 IS 978 FT WITH A SLOPE OF 0.0082
              * CROSS SECTION IS A SUBDIVISION ROAD
              *
              * DDM   ***** Preserved *****

1971          KK  R21A25
1972          RS       5    FLOW       0
1973          RC    0.03    0.02    0.03     978  0.0082
1974          RX       0       1      50      55      90      95     145     146
1975          RY       8       3     0.5       0       0     0.5       3       8
              *
              *

1976          KK  N21A24   BASIN
1977          BA    .018
1978          LG    4.00    0.35    2.65    1.40      30
1979          UC   0.400   0.422
1980          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1981          UA     100
              *
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
1982          KK  N21A26   BASIN
1983          BA    .026
1984          LG    0.25    0.35    2.65    1.40      30
1985          UC   0.446   0.522
1986          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1987          UA     100
              *
              *

1988          KK  N21A27   BASIN
1989          BA    .004
1990          LG    0.20    0.29    2.65    1.90       0
1991          UC   0.358   0.561
1992          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1993          UA     100
              *
              *
              * DDM   ***** Preserved *****

1994          KK  C21A27
1995          HC       4
              *
              * *** STORAGE L21A27 ************************************************************
              *
              * 30' WEIR (10' WIDE) (DRAINAGE REPORT), WEIR ELEVATION = 1284 (SURVEY & REPORT)
              *    WEIR COEFF = 2.543
              * THE 1-8"PVC THAT DRAINS THIS BASIN WAS TAKEN FROM THE DRAINAGE REPORT.
              *

1996          KK  L21A27
1997          RS       1    STOR       0
1998          SQ       0       1       3      76     216
1999          SE    1281    1282    1284    1285    1286
2000          SV       0     0.2     1.9       2       2
2001          SE    1281    1282    1284    1285    1286
              *
              *

2002          KK  N21A23   BASIN
2003          BA    .026
2004          LG    0.25    0.35    2.65    1.40      30
2005          UC   0.450   0.501
2006          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2007          UA     100
              *
              *
              * *** ROUTE R21A23 **************************************************************
              * ROUTE R21A23 IS 1204 FT WITH A SLOPE OF 0.005
              * CROSS SECTION IS A SWALE
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2008          KK  R21A23
2009          RS       5    FLOW       0
2010          RC    0.03     .03    0.03    1204    .005
2011          RX       0       1      11      66      86      97     108     109
2012          RY       8       4       3       0       0       3       4       8
              *
              *

2013          KK  N21A28   BASIN
2014          BA    .006
2015          LG    0.20    0.35    2.65    1.90       0
2016          UC   1.242   3.148
2017          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2018          UA     100
              *
              *

2019          KK  N21A29   BASIN
2020          BA    .017
```

```
2021          LG    0.25    0.35    2.65    1.40      30
2022          UC   0.467   0.749
2023          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2024          UA     100
              *
              *
              * DDM   ***** Preserved *****

2025          KK  C21A28
2026          HC       4
              *
              *
              * *** STORAGE L2A281 ***********************************************************
              *
              * 30' WEIR (30' WIDE)(DRAINAGE REPORT), WEIR ELEVATION = 1284 (SURVEY),
              * WEIR COEF = 2.7
              * THE 2-8" PVC PIPES THAT DRAIN THE BASIN WERE ASSUMED TO BE 1-12" WITH
              * INLET CONTROL. (IE = 1280.0 - SURVEY)
              *

2027          KK  L2A281
2028          RS       1    STOR       0
2029          SQ       2       5       7     116     314
2030          SE    1281    1282    1284    1285    1286
2031          SV       0    0.14     1.6     1.6     1.7
2032          SE    1281    1282    1284    1285    1286
              *
              *
              * *** STORAGE L2A282 ***********************************************************
              *
              * ASSUMED A 50' WEIR-20' WIDE (SURVEY), WEIR ELEVATION = 1281' (SURVEY)
              * WEIR COEFF = 2.685
              * THE 8" PVC PIPES THAT DRAIN THE BASIN WERE ASSUMED TO BE 1-12" WITH
              * INLET CONTROL. (IE = 1277.4 - SURVEY)
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2033          KK  L2A282
2034          RS       1    STOR       0
2035          SQ       4       6     143     391
2036          SE    1279    1280    1282    1283
2037          SV       0     0.2     1.6     1.6
2038          SE    1279    1280    1282    1283
              *
              *

2039          KK  N21A32   BASIN
2040          BA    .004
2041          LG    0.20    0.35    2.65    1.90       0
2042          UC   0.404   0.675
2043          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2044          UA     100
              *
              *
              * DDM   ***** Preserved *****

2045          KK  C21A32
2046          HC       2
              *
              *
              * *** STORAGE L2A283 ***********************************************************
              *
              * ASSUMED A 40' WEIR-30' WIDE (SURVEY & REPORT)
              * WEIR ELEVATION = 1277' (SURVEY & REPORT)
              * WEIR COEFF = 2.69
              * THE 8" PVC PIPES THAT DRAIN THE BASIN WERE ASSUMED TO BE 1-12" WITH
              * INLET CONTROL. (IE = 1274 - SURVEY)
              *
              *

2047          KK  L2A283
2048          RS       1    STOR       0
```

```
2049        SQ       0       5       6     108     304
2050        SE    1274    1276    1277    1278    1279
2051        SV       0     0.2     0.4     0.4     0.4
2052        SE    1274    1276    1277    1278    1279
            *
            *

2053        KK  N21A31   BASIN
2054        BA    .017
2055        LG    0.25    0.35    2.65    1.40      30
2056        UC   0.308   0.299
2057        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2058        UA     100
            *
            *
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2059        KK  N21A33   BASIN
2060        BA    .039
2061        LG    0.24    0.35    2.65    1.38      28
2062        UC   0.504   0.541
2063        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2064        UA     100
            *
            *
            * DDM   ***** Preserved *****

2065        KK  C21A33
2066        HC       3
            *
            *

2067        KK  N21A22   BASIN
2068        BA    .007
2069        LG    0.05    0.35    2.65    1.80      95
2070        UC   0.333   0.864
2071        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2072        UA     100
            *
            *
            * *** DIVERSION RECOVER DRN23A  ***********************************************
            * RECOVER DIVERTED FLOW FROM  DEER VALLEY RD (CN23A)
            * DDM   ***** Preserved *****

2073        KK  DRN23A
2074        DR   N23AI
            *
            *
            * *** ROUTE RN23AS ************************************************************
            * ROUTE RN23AS IS 6853 FT WITH A SLOPE OF 0.005
            * CROSS SECTION IS A MEDIUM ROAD WITH FENCE ON BOTH SIDES
            * ALONG local STREETS
            * ROUTE FLOW TO Loop 101 (CN21A) FROM DEER VALLEY RD (CN23A)
            * DDM   ***** Preserved *****

2075        KK  RN23AS
2076        RS      22    FLOW       0
2077        RC    0.04    0.03    0.04    6853   0.005
2078        RX       0       1      29      30      80      81     109     110
2079        RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
            *
            * DDM   ***** Preserved *****

2080        KK  C21A22
2081        HC       2
            *
            *
            * *** DIVERSION DN21A22 *******************************************************
            * CURB INLETS WILL CAPTURE 2.6 CFS MAX, THE REMAINING FLOW CONTINUES DOWN THE
            * STREET.
            * DDM   ***** Preserved *****
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2082          KK  D21A22
2083          DT  21A22I
2084          DI       0       1       2       3       4       6       8       9      10
2085          DQ       0       0       0      .4     1.4     3.4     5.4     6.4     7.4
              *
              *

2086          KK  N21A30   BASIN
2087          BA    .024
2088          LG    0.25    0.35    2.65    1.40      30
2089          UC   0.412   0.476
2090          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2091          UA     100
              *
              *

2092          KK  N21AP1   BASIN
2093          BA    .017
2094          LG    0.14    0.35    2.65    1.28      57
2095          UC   1.004   1.592
2096          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2097          UA     100
              *
              * DDM   ***** Preserved *****

2098          KK  C21AP1
2099          HC       4
              *
              *
              * *** STORAGE L21AP1 ************************************************************
              *
              * ASSUMED A 25' WEIR-10'WIDE (SURVEY)
              * WEIR ELEVATION AT 1275'(SURVEY & REPORT)
              * MAX WSEL = 1275'
              * WEIR COEFF = 2.695
              *

2100          KK  L21AP1
2101          KO       3
2102          RS       1    STOR       0
2103          SQ       0      67     191     355
2104          SE    1275    1276    1277    1278
2105          SV       0     5.1    10.7    17.1
2106          SE    1275    1276    1277    1278
              *
              *

2107          KK  N21AP2   BASIN
2108          BA    .015
2109          LG    0.23    0.35    2.65    1.42      32
2110          UC   0.346   0.304
2111          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2112          UA     100
              *
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2113          KK  C21AP2
2114          HC       2
              *
              *
              * *** STORAGE L21AP2 ************************************************************
              *
              * ASSUMED A 100 FOOT WIER  WIER ELEVATION AT 1272'  WSEL = 1272'
              * THIS LAKE HAS VIRTUALLY NO STORAGE AND WAS PLACED IN THE PROGRAM TO GET
              * THE WSEL AT THE WEIR.
              *
```

```
2115          KK  L21AP2
2116          KO       3
2117          RS       1    STOR       0
2118          SQ       0       5     270     765
2119          SE    1271    1272    1273    1274
2120          SV       0       0    0.06    0.16
2121          SE    1271    1272    1273    1274
              *
              *
              *

2122          KK  N21A37   BASIN
2123          BA    .013
2124          LG    0.25    0.35    2.65    1.40      30
2125          UC   0.313   0.320
2126          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2127          UA     100
              *
              *
              * DDM   ***** Preserved *****

2128          KK  C21APA
2129          HC       3
              *
              *

2130          KK  N21A34   BASIN
2131          BA    .016
2132          LG    0.25    0.29    2.65    1.40      30
2133          UC   0.300   0.329
2134          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2135          UA     100
              *
              *

2136          KK  N21A35   BASIN
2137          BA    .012
2138          LG    0.25    0.35    2.65    1.40      30
2139          UC   0.250   0.263
2140          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2141          UA     100
              *
              *
```

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```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2142          KK  N21AP5   BASIN
2143          BA    .008
2144          LG    0.14    0.35    2.65    1.46      42
2145          UC   0.246   0.305
2146          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2147          UA     100
              *
              * *** STORAGE L21AP5 ************************************************************
              *
              * ASSUMED A 40' WEIR-40'WIDE (SURVEY)
              * WEIR ELEVATION IS 1268.5' (SURVEY)  WSEL = 1266' (FULL - SURVEY)
              * WEIR COEFF = 2.68
              * 36" RCP EQUALIZER CULVERT 1/2 SUBMERGED IE = 1263.1' (ASSUMED NO EFFECT)
              *

2148          KK  L21AP5
2149          KO                                      21
2150          RS       1    STOR       0
2151          SQ       0       0       7      38     197
2152          SE    1265    1266    1268    1269    1270
2153          SV       0       0    3.63    5.72    8.12
2154          SE    1265    1266    1268    1269    1270
              *
              *

2155          KK  N21AP4   BASIN
2156          BA    .030
```

```
2157          LG    0.12    0.35    2.65    1.38      52
2158          UC   0.471   0.419
2159          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2160          UA     100
              *
              *
              * DDM   ***** Preserved *****

2161          KK  C21APB
2162          HC       5
              *
              * *** STORAGE L21AP4 ************************************************************
              *
              * WEIR = 87' 1' WIDE (SURVEY)
              * WEIR ELEVATION IS 1265.7' (SURVEY) WSEL = 1265.7' (FULL)
              * WEIR COEFF = 3.24  (CULVERT REDUCES WEIR FLOW AT 1268' FROM 820CFS TO 768CFS)
              *

2163          KK  L21AP4
2164          KO       3
2165          RS       1    STOR       0
2166          SQ       0      46     418     768
2167          SE    1265    1266    1267    1268
2168          SV       0    2.79   11.60   21.28
2169          SE    1265    1266    1267    1268
              *
              *
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2170          KK  N21A39   BASIN
2171          BA    .010
2172          LG    0.05    0.35    2.65    1.80      95
2173          UC   0.512   1.409
2174          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2175          UA     100
              *
              *
              * *** DIVERSION RECOVER DR21A22  ******************************************
              * RECOVER FLOWS FROM D21A22

2176          KK  DR2122
2177          DR  21A22I
              *
              *
              * *** ROUTE R21A22 ***************************************************************
              * ROUTE R21A22 IS 2699 FT WITH A SLOPE OF 0.0041
              * CROSS SECTION IS A SWALE
              *
              * DDM   ***** Preserved *****

2178          KK  R21A22
2179          RS       5    FLOW       0
2180          RC    0.03     .03    0.03    2699   .0041
2181          RX       0       1      21      22      64      65      85      90
2182          RY       8       4       3     2.5     2.5       3       4       5
              *
              *
              * DDM   ***** Preserved *****

2183          KK  C21A39
2184          HC       3
              *
              *
              * *** ROUTE R21A39 ***************************************************************
              * ROUTE R21A39 IS 1068 FT WITH A SLOPE OF 0.0056
              * CROSS SECTION IS A DRAINAGE CHANNEL
              *
              * DDM   ***** Preserved *****

2185          KK  R21A39
2186          KO       0       0       0       0      21
```

```
2187          RS       2    FLOW       0
2188          RC   0.035   0.035   0.035    1068  0.0056
2189          RX       0       1      30      55      90     115     145     146
2190          RY       8       4       2       0       0       2       4       8
              *
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2191          KK  N21A40   BASIN
2192          BA    .053
2193          LG    0.24    0.35    2.65    1.48      25
2194          UC   0.546   0.525
2195          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2196          UA     100
              *
              *
              * DDM   ***** Preserved *****

2197          KK  C21A40
2198          HC       2
              *
              *

2199          KK  N21A41   BASIN
2200          BA    .028
2201          LG    0.25    0.35    2.65    1.40      30
2202          UC   0.475   0.507
2203          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2204          UA     100
              *
              *

2205          KK  N21A42   BASIN
2206          BA    .021
2207          LG    0.25    0.35    2.65    1.40      30
2208          UC   0.475   0.495
2209          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2210          UA     100
              *
              *

2211          KK  N21A43   BASIN
2212          BA    .004
2213          LG    0.22    0.35    2.65    1.70      12
2214          UC   0.242   0.287
2215          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2216          UA     100
              *
              *
              * DDM   ***** Preserved *****

2217          KK  C21A42
2218          HC       4
              *
              * *** STORAGE L21A43 ************************************************************
              *
              * WEIR = 65'-15'WIDE (SURVEY)  WEIR ELEVATION IS 1257' (SURVEY)
              * WEIR COEFFECIENT = 2.64
              * 24"RCP RELIEF SEWER FL=1252.3 (SURVEY)
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2219          KK  L21A43
2220          KO       3
2221          RS       1    STOR       0
2222          SQ       0      10      24      29     205     525     928
2223          SE    1253    1254    1256    1257    1258    1259    1260
2224          SV       0     .16    1.42    1.84    3.74    3.75    3.76
2225          SE    1253    1254    1256    1257    1258    1259    1260
```

```
*
*
*
* DDM   ***** Updated *****

KK    A21P   BASIN
KM   SUB-BASIN A21P
KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
KM     L = .40  Kb = .058  Adj. Slope = 12.0
BA    .035
LG    0.22    0.14    7.60    0.12      46
UC    .267    .277
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*
*

KK  A21PRR
KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #17) IN SUB-BASIN A21P.
KM   ASSUME LAKE OUTFALL BY OVERTOPPING ADJACENT ROADWAY ON WEST.
KM   EXISTING WATER SURFACE AND STREET ELEVATIONS WERE REFERENCE FROM
KM   THE 1996 FCD TOPO FILE.
KM   NOTE 24" PIPE OUTLET PER CAMELOT VIEWS AT ARROWHEAD RANCH REPORT - 1993.
KM   ASSUME PIPE IS RUNNING FULL WITH GRATED INLET AT WATER SUFACE LEVEL.
KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
RS       1    ELEV    1278
SV       0    0.65    1.35    2.07    2.81    5.02    5.78    8.05    8.81
SE    1278  1278.5    1279  1279.5    1280  1280.5    1281  1281.5    1282
SQ       0      16      16      16      16      16      16     122     322
*
*
* *** ROUTE  RA21P ************************************************************
* FLOW IN 24" OUTLET STROM DRAIN WEST TO LAKE #18
* ROUTE RA21P IS 500 FT WITH APPROX. SLOPE OF 0.0050 (MEASURED)
* CROSS SECTION IS A 24" CONCRETE PIPE PER CAMELOT VIEWS REPORT - 1993.
*
* *** ROUTE FLOW TO CA21Q FROM BASIN A21PRR (LAKE #17) *************************
* DDM   ***** Updated *****

KK  RA21P
RS       1    FLOW      -1
RD     500   .0050    .013            CIRC       2
*
* DDM   ***** Updated *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK    A21V   BASIN
KM   SUB-BASIN A21V
KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
KM     L = .31  Kb = .031  Adj. Slope = 26.0
BA    .037
LG    0.19    0.14    8.40    0.12       7
UC    .142    .109
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*
*
* *** STORAGE LA21V ***********************************************************
* APPROX. 23.9 ACRES FROM BASIN A21V, ARROWHEAD LAKES GOLF COURSES
* RETAINED FOR THE 100-YR, 24-HR  STORM EVENT.
* REQUIRED VOLUME = 2 AC.-FT.
* ASSUME GOLF COURSE IS 100% RETAINED ITSELF, AND DRAINS VIA DRYWELLS.
* DDM   ***** Updated *****

KK   LA21V
DT   A21VR
DI       0   10000
DQ       0   10000
*
*
```

```
                *
                * DDM   ***** Updated *****

2265            KK    A21Q   BASIN
2266            KM   SUB-BASIN A21Q
2267            KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2268            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2269            KM     L = .82  Kb = .060  Adj. Slope = 43.0
2270            BA    .043
2271            LG    0.24    0.24    4.70    0.38      41
2272            UC    .254    .415
2273            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2274            UA     100
                *
                *
                * *** COMBINE  CA21Q ***********************************************************
                * COMBINE RA21P AND BASIN A21Q
                * DDM   ***** Preserved *****

2275            KK   CA21Q
2276            HC       3
                *
                *
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2277            KK  A21QRR
2278            KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #18) IN SUB-BASIN A21Q.
2279            KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
2280            KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
2281            KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
2282            KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
2283            KO       0       0       0       0      21
2284            RS       1    ELEV  1277.5
2285            SV       0    0.39    0.80    1.22    1.66    2.12    2.58    3.04    3.51
2286            SE  1277.5    1278  1278.5    1279  1279.5    1280  1280.5    1281  1281.5
2287            SQ       0      29      89     179     280     393     518     652     797
                *
                *
                * DDM   ***** Updated *****

2288            KK    A21R   BASIN
2289            KM   SUB-BASIN A21R
2290            KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2291            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2292            KM     L = .15  Kb = .066  Adj. Slope = 20.0
2293            BA    .008
2294            LG    0.22    0.22     4.8    0.36      48
2295            UC    .162    .169
2296            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2297            UA     100
                *
                *
                * *** COMBINE  CA21R ***********************************************************
                * COMBINE A21QRR AND BASIN A21R
                * DDM   ***** Preserved *****

2298            KK   CA21R
2299            HC       2
                *
                *

2300            KK  A21RRR
2301            KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #19) IN SUB-BASIN A21R.
2302            KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
2303            KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
2304            KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
2305            KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
2306            RS       1    ELEV    1276
2307            SV       0    0.34    0.71    1.08    1.47    1.88    2.30    2.71    3.13
2308            SE    1276  1276.5    1277  1277.5    1278  1278.5    1279  1279.5    1280
2309            SQ       0      24      75     149     233     327     431     544     664
                *
```

```
                 *
                 * DDM   ***** Updated *****
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LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2310             KK    A21S   BASIN
2311             KM   SUB-BASIN A21S
2312             KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2313             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2314             KM     L = .23  Kb = .064  Adj. Slope = 22.0
2315             BA    .015
2316             LG    0.23    0.23    4.70    0.36      44
2317             UC    .188    .196
2318             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2319             UA     100
                 *
                 *
                 * *** COMBINE  CA21S ***********************************************************
                 * COMBINE A21RRR AND BASIN A21S
                 * DDM   ***** Preserved *****

2320             KK   CA21S
2321             HC       2
                 *
                 *

2322             KK  A21SRR
2323             KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #20) IN SUB-BASIN A21S.
2324             KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
2325             KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
2326             KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
2327             KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
2328             RS       1    ELEV    1273
2329             SV       0    0.33    0.67    1.03    1.40    1.78    2.16    2.54    2.93
2330             SE    1273  1273.5    1274  1274.5    1275  1275.5    1276  1276.5    1277
2331             SQ       0      29      89     179     280     393     518     652     797
                 *
                 *
                 * DDM   ***** Updated *****

2332             KK    A21T   BASIN
2333             KM   SUB-BASIN A21T
2334             KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2335             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2336             KM     L = .31  Kb = .056  Adj. Slope = 23.0
2337             BA    .038
2338             LG    0.21    0.22    5.00    0.33      48
2339             UC    .188    .146
2340             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2341             UA     100
                 *
                 *
                 * *** COMBINE  CA21T ***********************************************************
                 * COMBINE A21SRR AND BASIN A21T
                 * DDM   ***** Preserved *****
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LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2342             KK   CA21T
2343             HC       2
                 *
                 *

2344             KK  A21TRR
2345             KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #21) IN SUB-BASIN A21T.
2346             KM   ASSUME LAKE OUTFALL BY OVERTOPPING ADJACENT ROADWAY ON WEST.
2347             KM   EXISTING WATER SURFACE ELEVATION WAS MEASURED BY PENTACORE, AND
2348             KM   STREET ELEVATION WAS ESTIMATED FROM THE 1996 FCD TOPO FILE.
2349             KM   NOTE 24" PIPE OUTLET TO ADOT 42" STROM DRAIN ALONG BEARDSLEY RD. PER
2350             KM   CAMELOT VIEWS AT ARROWHEAD RANCH REPORT-1993.
2351             KM   ASSUME PIPE IS RUNNING FULL WITH GRATED INLET AT WATER SUFACE LEVEL.
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2352        KM   SOURCE: NEW ANALYSIS FOR ARROWHEAD RANCH.
2353        RS       1    ELEV    1268
2354        SV       0    1.71    3.50    5.34    7.22    9.12   11.01   12.91   14.81
2355        SE    1268  1268.5    1269  1269.5    1270  1270.5    1271  1271.5    1272
2356        SQ       0      16      16      16      16      16      16      53     153
            *
            *
            * *** ROUTE RA21T ***********************************************************
            * ROUTE RA21T IS 1050 FT WITH APPROX. SLOPE OF .0050 (MEASURED)
            * CROSS SECTION IS A 24" CONCRETE PIPE PER CAMELOT VIEWS REPORT - 1993.
            * ROUTE FLOW TO C21AE FROM A21TRR, AND ULTIMATELY TO THE EXISTING ADOT
            * 42" STORM DRAIN ALONG NORTH SIDE OF BEARDSLEY RD.
            * DDM   ***** Preserved *****

2357        KK   RA21T
2358        RS       3    FLOW      -1
2359        RD    1050   .0050    .013            CIRC       2
            *
            *
            * DDM   ***** Updated *****

2360        KK   A21AE   BASIN
2361        KM   SUB-BASIN A21AE
2362        KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2363        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2364        KM     L = .24  Kb = .055  Adj. Slope = 29.0
2365        BA    .047
2366        LG    0.23    0.18    7.00    0.13      34
2367        UC    .150    .082
2368        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2369        UA     100
            *
            *
            * *** STORAGE LA21AE ********************************************************
            * APPROX. 30.2 ACRES FROM BASIN A21AE, ARROWHEAD LAKES RESIDENTIAL DEVELOPMENT
            * RETAINED FOR THE 100-YR, 2-HR STORM EVENT.
            * REQUIRED VOLUME = 3.4 AC.-FT.
            * DDM   ***** Updated *****
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2370        KK  LA21AE
2371        DT  A21AER     3.4
2372        DI       0   10000
2373        DQ       0   10000
            *
            *
            * DDM   ***** Updated *****

2374        KK   A21AF   BASIN
2375        KM   SUB-BASIN A21AF
2376        KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2377        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2378        KM     L = .10  Kb = .071  Adj. Slope = 40.0
2379        BA    .004
2380        LG    0.23    0.27    5.60    0.24      35
2381        UC    .117    .126
2382        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2383        UA     100
            *
            *
            * *** STORAGE LA21AF ********************************************************
            * APPROX. 2.75 ACRES FROM BASIN A21AF, ARROWHEAD LAKES RESIDENTIAL DEVELOPMENT
            * RETAINED FOR THE 100-YR, 2-HR STORM EVENT.
            * REQUIRED VOLUME = 0.35 AC.-FT.
            * DDM   ***** Updated *****

2384        KK  LA21AF
2385        DT  A21AFR    0.35
2386        DI       0   10000
2387        DQ       0   10000
            *
            *
```

```
* DDM   ***** Updated *****

KK    A21X   BASIN
KM   SUB-BASIN A21X
KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
KM     L = .56  Kb = .033  Adj. Slope = 29.0
BA    .024
LG    0.20    0.25    5.70    0.33       2
UC    .200    .327
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*
*
* *** STORAGE LA21X ***********************************************************
* APPROX. 15.45 ACRES FROM BASIN A21X, ARROWHEAD LAKES GOLF COURSES
* RETAINED FOR THE 100-YR, 24-HR STORM EVENT.
* REQUIRED VOLUME = 1.3 AC.-FT.
* ASSUME GOLF COURSE IS 100% RETAINED ITSELF, AND DRAINS VIA DRYWELLS.
* DDM   ***** Updated *****
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK   LA21X
DT   A21XR
DI       0   10000
DQ       0   10000
*
*
* DDM   ***** Updated *****

KK    A21W   BASIN
KM   SUB-BASIN A21W
KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
KM     L = .41  Kb = .033  Adj. Slope = 22.0
BA    .018
LG    0.20    0.25    4.70    0.51       2
UC    .196    .293
UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
UA     100
*
*
* *** STORAGE LA21W ***********************************************************
* APPROX. 11.25 ACRES FROM BASIN A21W, ARROWHEAD LAKES GOLF COURSES
* RETAINED FOR THE 100-YR, 24-HR STORM EVENT.
* REQUIRED VOLUME = 1 AC.-FT.
* ASSUME GOLF COURSE IS 100% RETAINED ITSELF, AND DRAINS VIA DRYWELLS.
* DDM   ***** Updated *****

KK   LA21W
DT   A21WR
DI       0   10000
DQ       0   10000
*
*
* *** COMBINE  CA21AE *********************************************************
* COMBINE RA21T, A21AE, A21AF, A21X, AND A21W
* DDM   ***** Preserved *****

KK  CA21AE
HC       5
*
*
* DDM   ***** Updated *****

KK    A21Y   BASIN
KM   SUB-BASIN A21Y
KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
KM     L = .39  Kb = .064  Adj. Slope = 38.0
BA    .050
LG    0.23    0.16    8.00    0.10      32
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```
2425          UC    .196    .157
2426          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2427          UA     100
              *
              *
              * *** STORAGE LA21Y ************************************************************
              * APPROX. 32.2 ACRES FROM BASIN A21Y, ARROWHEAD LAKES RESIDENTIAL DEVELOPMENT
              * RETAINED FOR THE 100-YR, 2-HR STORM EVENT.
              * REQUIRED VOLUME = 3.65 AC.-FT.
              * DDM   ***** Updated *****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2428          KK   LA21Y
2429          DT   A21YR    3.65
2430          DI       0   10000
2431          DQ       0   10000
              *
              *
              * DDM   ***** Updated *****

2432          KK    A21Z   BASIN
2433          KM   SUB-BASIN A21Z
2434          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2435          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2436          KM     L = .44  Kb = .052  Adj. Slope = 39.0
2437          BA    .065
2438          LG    0.22    0.26    6.20    0.18      32
2439          UC    .188    .143
2440          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2441          UA     100
              *
              *
              * *** STORAGE LA21Z ************************************************************
              * APPROX. 41.4 ACRES FROM BASIN A21Z, ARROWHEAD LAKES RESIDENTIAL DEVELOPMENT
              * RETAINED FOR THE 100-YR, 2-HR STORM EVENT.
              * REQUIRED VOLUME = 4.7 AC.-FT.
              * DDM   ***** Updated *****

2442          KK   LA21Z
2443          DT   A21ZR     4.7
2444          DI       0   10000
2445          DQ       0   10000
              *
              *
              * *** ROUTE RA21Z ***************************************************************
              * ROUTE RA21Z IS 750 FT WITH APPROX. SLOPE OF .0050 (MEASURED FROM 1996 TOPO)
              * CROSS SECTION IS EXISTING SWALE ALONG NORTH SIDE OF BEARDSLEY RD.
              *
              * ROUTE FLOW TO CA21AB FROM LA21Z
              * DDM   ***** Preserved *****

2446          KK   RA21Z
2447          RS       2    FLOW       0
2448          RC    .035    .035    .035     750    .005
2449          RX       0     100     288     300     305     317     500     600
2450          RY       6       5       4       0       0       4       5       6
              *
              *
              * DDM   ***** Updated *****
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2451          KK   A21AB   BASIN
2452          KM   SUB-BASIN A21AB
2453          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2454          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2455          KM     L = .26  Kb = .031  Adj. Slope = 12.0
2456          BA    .036
2457          LG    0.10    0.16    9.70    0.06      74
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2458          UC    .167    .115
2459          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2460          UA     100
              *
              *
              * *** STORAGE LA21AB ***********************************************************
              * APPROX. 23 ACRES FROM BASIN A21AB, COMMERCIAL DEVELOPMENT
              * ASSUME RETAINED 80% FOR THE 100-YR, 2-HR STORM EVENT.
              * REQUIRED VOLUME = 4.6 AC.-FT.
              * DDM   ***** Updated *****

2461          KK  LA21AB
2462          DT  A21ABR     3.7
2463          DI       0   10000
2464          DQ       0   10000
              *
              *
              * *** COMBINE  A21AB ************************************************************
              * COMBINE BASINS A21Y (LA21Y), A21Z (RA21Z),  AND A21AB (LA21AB)
              * DDM   ***** Preserved *****

2465          KK  CA21AB
2466          HC       3
              *
              *
              * *** ROUTE RA21AB **************************************************************
              * ROUTE RA21AB IS 1300 FT WITH APPROX. SLOPE OF .0025 (MEASURED)
              * CROSS SECTION IS EXISTING 42" ADOT STORM DRAIN ALONG BEARDSLEY RD.
              *
              * ROUTE FLOW TO CA21AD FROM CA21AB
              * DDM   ***** Preserved *****

2467          KK  RA21AB
2468          RS       1    FLOW      -1
2469          RD    1300   .0025    .013            CIRC     3.5
              *
              *
              * DDM   ***** Updated *****

2470          KK   A21AC   BASIN
2471          KM   SUB-BASIN A21AC
2472          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2473          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2474          KM     L = .20  Kb = .033  Adj. Slope = 30.0
2475          BA    .022
2476          LG    0.10    0.16    8.80    0.07      72
2477          UC    .117    .083
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2478          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2479          UA     100
              *
              *
              * *** STORAGE LA21AC ***********************************************************
              * APPROX. 14.27 ACRES FROM BASIN A21AC, COMMERICAL DEVELOPMENT
              * ASSUME RETAINED 80% FOR THE 100-YR, 2-HR STORM EVENT.
              * REQUIRED VOLUME = 2.85 AC.-FT.
              * DDM   ***** Updated *****

2480          KK  LA21AC
2481          DT  A21ACR     2.3
2482          DI       0   10000
2483          DQ       0   10000
              *
              *
              * DDM   ***** Updated *****

2484          KK   A21AA   BASIN
2485          KM   SUB-BASIN A21AA
2486          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2487          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2488          KM     L = .13  Kb = .066  Adj. Slope = 31.0
2489          BA    .011
```

```
2490          LG    0.24    0.14   10.10    0.04      37
2491          UC    .129    .097
2492          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2493          UA     100
              *
              *
              * *** STORAGE LA21AA ************************************************************
              * APPROX. 7.0 ACRES FROM BASIN A21AA, ARROWHEAD LAKES RESIDENTIAL DEVELOPMENT
              * RETAINED FOR THE 100-YR, 2-HR STORM EVENT.
              * REQUIRED VOLUME = 0.8 AC.-FT.
              * DDM   ***** Updated *****

2494          KK  LA21AA
2495          DT  A21AAR     0.8
2496          DI       0   10000
2497          DQ       0   10000
              *
              *
              * DDM   ***** Updated *****

2498          KK   A21AD   BASIN
2499          KM   SUB-BASIN A21AD
2500          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2501          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2502          KM     L = .41  Kb = .056  Adj. Slope = 20.0
2503          BA    .053
2504          LG    0.24    0.16    8.80    0.07      36
2505          UC    .237    .196
2506          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2507          UA     100
              *
              *
              * *** STORAGE LA21AD ************************************************************
              * APPROX. 33.65 ACRES FROM BASIN A21AD, ARROWHEAD LAKES RESIDENTIAL DEVELOPMENT
              * RETAINED FOR THE 100-YR, 2-HR STORM EVENT.
              * REQUIRED VOLUME = 3.8 AC.-FT.
              * DDM   ***** Updated *****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2508          KK  LA21AD
2509          DT  A21ADR     3.8
2510          DI       0   10000
2511          DQ       0   10000
              *
              *
              * *** COMBINE  CA21AD ************************************************************
              * COMBINE RA21AB, BASINS A21AA, A21AC (LA21AC) AND A21AD
              * DDM   ***** Preserved *****

2512          KK  CA21AD
2513          HC       4
              *
              *
              * *** ROUTE RA21AD ***************************************************************
              * ROUTE RA21AD IS 1300 FT WITH APPROX. SLOPE OF .0025 (MEASURED)
              * CROSS SECTION IS EXISTING 42" ADOT STORM DRAIN ALONG BEARDSLEY RD.
              *
              * ROUTE FLOW TO A21AEC FROM CA21AD
              * DDM   ***** Preserved *****

2514          KK  RA21AD
2515          RS       2    FLOW      -1
2516          RD    1300   .0025    .013            CIRC     3.5
              *
              *
              * *** COMBINE  A21AEC ************************************************************
              * COMBINE CA21AE AND RA21AD
              * DDM   ***** Preserved *****

2517          KK  A21AEC
2518          HC       2
              *
```

```
                 *
                 * *** ROUTE RA21AE ***********************************************************
                 * ROUTE RA21AE IS 1225 FT WITH APPROX. SLOPE OF .0025 (MEASURED)
                 * CROSS SECTION IS EXISTING 42" ADOT STORM DRAIN ALONG BEARDSLEY RD.
                 * ROUTE FLOW TO CA21AG FROM A21AEC
                 * DDM   ***** Preserved *****

2519             KK  RA21AE
2520             RS       2    FLOW      -1
2521             RD    1225   .0025    .013            CIRC     3.5
                 *
                 *
                 * DDM   ***** Updated *****

2522             KK   A21AG   BASIN
2523             KM   SUB-BASIN A21AG
2524             KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2525             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2526             KM     L = .23  Kb = .059  Adj. Slope = 30.0
2527             BA    .031
2528             LG    0.23    0.27    5.60    0.24      35
1                                              HEC-1 INPUT                                          PAGE10

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2529             UC    .154    .104
2530             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2531             UA     100
                 *
                 *
                 * *** STORAGE LA21AG *********************************************************
                 * APPROX. 19.75 ACRES FROM BASIN A21AG, ARROWHEAD LAKES RESIDENTIAL DEVELOPMENT
                 * RETAINED FOR THE 100-YR, 2-HR STORM EVENT.
                 * REQUIRED VOLUME = 2.25 AC.-FT.
                 * DDM   ***** Updated *****

2532             KK  LA21AG
2533             DT  A21AGR    2.25
2534             DI       0   10000
2535             DQ       0   10000
                 *
                 *
                 * *** COMBINE  CA21AG *********************************************************
                 * COMBINE RA21AE AND BASIN A21AG (LA21AG)
                 * DDM   ***** Preserved *****

2536             KK  CA21AG
2537             HC       2
                 *
                 *
                 * *** ROUTE RA21AG ************************************************************
                 * ROUTE RA21AG IS 950 FT WITH APPROX. SLOPE OF .0025 (MEASURED)
                 * CROSS SECTION IS EXISTING 42" ADOT STORM DRAIN ALONG BEARDSLEY RD.
                 *
                 * ROUTE FLOW TO CA21AK (67TH AVE. & BEARDSLEY RD.) FROM CA21AG
                 * DDM   ***** Preserved *****

2538             KK  RA21AG
2539             RS       1    FLOW      -1
2540             RD     950   .0025    .013            CIRC     3.5
                 *
                 *
                 * DDM   ***** Updated *****

2541             KK   A21AH   BASIN
2542             KM   SUB-BASIN A21AH
2543             KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2544             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2545             KM     L = .21  Kb = .060  Adj. Slope = 33.0
2546             BA    .025
2547             LG    0.23    0.26    4.90    0.33      36
2548             UC    .150    .106
2549             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2550             UA     100
                 *
```

```
                *
                * *** STORAGE LA21AH ***********************************************************
                * APPROX. 16.1 ACRES FROM BASIN A21AH, ARROWHEAD LAKES RESIDENTIAL DEVELOPMENT
                * RETAINED FOR THE 100-YR, 2-HR STORM EVENT.
                * REQUIRED VOLUME = 1.85 AC.-FT.
                * DDM   ***** Updated *****
                                                HEC-1 INPUT                                          PAGE10

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2551            KK  LA21AH
2552            DT  A21AHR    1.85
2553            DI       0   10000
2554            DQ       0   10000
                *
                *
                * DDM   ***** Updated *****

2555            KK   A21AI   BASIN
2556            KM   SUB-BASIN A21AI
2557            KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2558            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2559            KM     L = .12  Kb = .068  Adj. Slope = 33.0
2560            BA    .007
2561            LG    0.24    0.26    4.80    0.35      37
2562            UC    .129    .118
2563            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2564            UA     100
                *
                *
                * *** STORAGE LA21AI ***********************************************************
                * APPROX. 4.65 ACRES FROM BASIN A21AI, ARROWHEAD RESIDENTIAL DEVELOPMENT
                * RETAINED FOR THE 100-YR, 2-HR STORM EVENT.
                * REQUIRED VOLUME = 0.55 AC.-FT.
                * DDM   ***** Updated *****

2565            KK  LA21AI
2566            DT  A21AIR    0.55
2567            DI       0   10000
2568            DQ       0   10000
                *
                *
                * DDM   ***** Updated *****

2569            KK   A21AJ   BASIN
2570            KM   SUB-BASIN A21AJ
2571            KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2572            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2573            KM     L = .14  Kb = .067  Adj. Slope = 29.0
2574            BA    .011
2575            LG    0.24    0.26    4.80    0.35      43
2576            UC    .162    .198
2577            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2578            UA     100
                *
                *
                * *** STORAGE LA21AJ ***********************************************************
                * APPROX. 6.25 ACRES FROM BASIN A21AJ, ARROWHEAD MULTI-FAMILY DEVELOPMENT
                * RETAINED FOR THE 100-YR, 2-HR STORM EVENT.
                * REQUIRED VOLUME = 1.1 AC.-FT.
                * DDM   ***** Updated *****
1                                               HEC-1 INPUT                                          PAGE102

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2579            KK  LA21AI
2580            DT  A21AIR     1.1
2581            DI       0   10000
2582            DQ       0   10000
                *
                *
                * *** COMBINE  CA21AJ ***********************************************************
                * COMBINE LA21AI,LA21AJ,L21AH
```

```
                *
                * DDM   ***** Preserved *****

2583            KK  CA21AJ
2584            HC       3
                *
                *
                * DDM   ***** Updated *****

2585            KK   A21AK   BASIN
2586            KM   SUB-BASIN A21AK
2587            KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
2588            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
2589            KM     L = .23  Kb = .031  Adj. Slope = 35.0
2590            BA    .043
2591            LG    0.10    0.26    4.80    0.37      73
2592            UC    .167    .094
2593            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2594            UA     100
                *
                *
                * *** STORAGE LA21AK ***********************************************************
                * APPROX. 27.6 ACRES FROM BASIN A21AK, COMMERICAL DEVELOPMENT
                * ASSUME RETAINED 80% FOR THE 100-YR, 2-HR STORM EVENT.
                * REQUIRED VOLUME = 5.5 AC.-FT.
                * DDM   ***** Updated *****

2595            KK  LA21AK
2596            DT  A21AKR     4.4
2597            DI       0   10000
2598            DQ       0   10000
                *
                *
                *
                * *** DIVERSION RECOVER DA21US **************************************************
                * RECALL THE DIVERTED FLOW FROM LAKE #16 (DA21U)
                * DDM   ***** Updated *****

2599            KK  DA21US
2600            DR  DA21US
                *
                *
                * *** ROUTE  RA21US *************************************************************
                * FLOW IN 24" PVC STROM DRAIN ON 67TH AVE. SOUTH TO BEARDSLEY RD.
                * ROUTE RA21US IS 2200 FT WITH APPROX. SLOPE OF 0.0025 (MEASURED)
                * CROSS SECTION IS EXISTING 24" PVC STORM DRAIN PIPE
                *
                * *** ROUTE FLOW TO CA21AK FROM A21URR (LAKE #16) *************************
                * DDM   ***** Updated *****
1                                          HEC-1 INPUT                                          PAGE10:

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2601            KK  RA21US
2602            RS       3    FLOW      -1
2603            RD    2200   .0025   0.010            CIRC       2
                *
                *

2604            KK  N21A38   BASIN
2605            BA    .023
2606            LG    0.24    0.35    2.65    1.46      27
2607            UC   0.421   0.475
2608            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2609            UA     100
                *
                * *** STORAGE L21A38 ************************************************************
                *
                * WEIR = 40'-50' WIDE (TOPO)  WEIR ELEVATION IS 1265'  (TOPO)
                * WEIR COEFFECIENT = 2.68
                *

2610            KK  L21A38
2611            RS       1    STOR       0
```

```
2612          SQ       0       0       0     108
2613          SE    1263    1264    1265    1266
2614          SV       0     .16     .73    1.46
2615          SE    1263    1264    1265    1266
              *
              *
              * *** ROUTE R21A38 ************************************************************
              * ROUTE R21A38 IS 1166 FT WITH A SLOPE OF 0.0069
              * CROSS SECTION IS 67TH AVENUE (FLOW MIGHT ENTER STORM SEWER)
              *
              * DDM   ***** Preserved *****

2616          KK  R21A38
2617          RS       5    FLOW       0
2618          RC   0.035   0.035   0.035    1162   .0069
2619          RX       0      50      75      80     145     150     175     225
2620          RY       5       2       1       0       0       1       2       4
              *
              *
              * *** COMBINE  CN21B ******************************************************
              * COMBINE R21A38, RA21US, AND CA21AK, CA21AJ
              *
              * DDM   ***** Preserved *****

2621          KK   CN21B
2622          HC       5    0.65
              *
              *
              * *** ROUTE RN21B **********************************************************
              * ROUTE RN21B IS 1808 FT WITH A SLOPE OF 0.0024
              * CROSS SECTION IS A MAN-MADE CHANNEL TO THE SOUTH SIDE OF BASIN N21A (MEASURED)
              * Man made CHANNEL
              * ROUTE FLOW TO 75th AVE (CN21A) FROM 67th AVE (CN21B)
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                    PAGE10

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2623          KK   RN21B
2624          RS       4    FLOW       0
2625          RC    0.04    0.02    0.04    1808  0.0024
2626          RX       0     100     150     162     182     194     244     294
2627          RY      16       6       6       0       0       6       7      11
              *
              *
              *

2628          KK  N21A44   BASIN
2629          BA    .025
2630          LG    0.21    0.35    2.65    1.34      53
2631          UC   0.383   0.355
2632          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2633          UA     100
              *
              * *** STORAGE L21A44 ******************************************************
              *
              * STORAGE FOR THE APARTMENT COMPLEX
              * NO WEIR, ONCE POND IS FILLED EXCESS SPILLS OUT INTO 101 CHANNEL
              *

2634          KK  L21A44
2635          RS       1    STOR       0
2636          SQ       0       0     100
2637          SE  1259.7    1262    1263
2638          SV       0    5.37    5.38
2639          SE  1259.7    1262    1263
              *
              * *** ROUTE R21A44 **********************************************************
              * ROUTE R21A44 IS 1334 FT WITH A SLOPE OF 0.0026
              * CROSS SECTION IS THE 101 CHANNEL
              *
              * DDM   ***** Preserved *****

2640          KK  R21A44
```

```
2641          RS       1    FLOW       0
2642          RC   0.035    0.02   0.035    1334  0.0026
2643          RX       0       1      17      32      47      62      87     117
2644          RY      12       7       6       0       0       6       8      10
              *
              *
              *

2645          KK  N21A90   BASIN
2646          BA    .012
2647          LG    0.07    0.35    2.65    1.65      75
2648          UC   0.608   1.704
2649          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2650          UA     100
              *
              * *** COMBINE  C21A43 ***********************************************************
              * COMBINE RN21B, L21A43, N21A90, AND R21A44
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE10
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2651          KK  C21A43
2652          HC       4
              *
              *
              * *** ROUTE R21A43 ***************************************************************
              * ROUTE R21A43 IS 2955 FT WITH A SLOPE OF 0.0014
              * CROSS SECTION IS I-101 CHANNEL
              *
              * DDM   ***** Preserved *****

2653          KK  R21A43
2654          RS       4    FLOW       0
2655          RC   0.035    0.02   0.035    2955  0.0014
2656          RX       0       1      17      32      47      62      87     117
2657          RY      12       7       6       0       0       6       8      10
              *
              *

2658          KK  N21A19   BASIN
2659          BA    .006
2660          LG    0.25    0.35    2.65    1.40      30
2661          UC   0.279   0.273
2662          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2663          UA     100
              *
              *

2664          KK  N21A91   BASIN
2665          BA    .005
2666          LG    0.05    0.35    2.65    1.80      95
2667          UC   0.346   0.987
2668          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2669          UA     100
              *
              *
              * DDM   ***** Preserved *****

2670          KK  C21A91
2671          HC       3
              *
              *
              * *** ROUTE R21A91 ***************************************************************
              * ROUTE R21A91 IS 1249 FT WITH A SLOPE OF 0.0014
              * CROSS SECTION IS I-101 CHANNEL
              *
              * DDM   ***** Preserved *****

2672          KK  R21A91
2673          RS       2    FLOW       0
2674          RC   0.035    0.02   0.035    1249  0.0014
2675          RX       0       1      17      32      47      62      87     117
```

```
2676          RY      12       7       6       0       0       6       8      10
              *
              *
1                                          HEC-1 INPUT                                                    PAGE106

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2677          KK   N21A4   BASIN
2678          BA    .009
2679          LG    0.25    0.35    2.65    1.40      30
2680          UC   0.275   0.327
2681          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2682          UA     100
              *
              * *** DIVERSION DN21A4 ******************************************************
              * FLOW IS CURB TO CURB, 60% WILL CONTINUE WEST AND 40% WILL FLOW SOUTH.
              *
              * DDM   ***** Preserved *****

2683          KK   D21A4
2684          DT   21A4I
2685          DI       0       1       2       5      10      20
2686          DQ       0      .4      .8       2       4       8
              *
              *
              *

2687          KK   N21A2   BASIN
2688          BA    .009
2689          LG    0.25    0.35    2.65    1.40      30
2690          UC   0.333   0.382
2691          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2692          UA     100
              *
              *

2693          KK   N21A3   BASIN
2694          BA    .016
2695          LG    0.25    0.35    2.65    1.40      30
2696          UC   0.354   0.461
2697          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2698          UA     100
              *
              *
              * DDM   ***** Preserved *****

2699          KK   C21A3
2700          HC       3
              *
              *
              * *** ROUTE R21A3 ************************************************************
              * ROUTE R21A3 IS  421 FT WITH A SLOPE OF 0.0095
              * CROSS SECTION IS A GRASSED SWALE
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE107

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2701          KK   R21A3
2702          RS       1    FLOW       0
2703          RC   0.035   0.035   0.035     421  0.0095
2704          RX       0       1      30      80     110     120     150     151
2705          RY       6       3       0       0       3       4       5       7
              *
              *

2706          KK   N21A1   BASIN
2707          BA    .022
2708          LG    0.24    0.37    5.30    0.28      28
2709          UC   0.313   0.333
2710          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2711          UA     100
```

```
                 *
                 * *** ROUTE R21A1 ************************************************************
                 * ROUTE R21A1 IS  533 FT WITH A SLOPE OF 0.0019
                 * CROSS SECTION IS THE PARKWAY
                 *
                 * DDM   ***** Preserved *****

2712             KK   R21A1
2713             RS       4    FLOW       0
2714             RC   0.035   0.035   0.035     533  0.0019
2715             RX       0       1      30      80     110     120     150     151
2716             RY       6       3       0       0       3       4       5       7
                 *
                 *

2717             KK   N21A5   BASIN
2718             BA    .010
2719             LG    0.20    0.35    2.65    1.62      11
2720             UC   0.583   0.872
2721             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2722             UA     100
                 *
                 *
                 * DDM   ***** Preserved *****

2723             KK   C21A5
2724             HC       3
                 *
                 * *** ROUTE R21A5 ************************************************************
                 * ROUTE R21A5 IS  378 FT WITH A SLOPE OF 0.0013
                 * CROSS SECTION IS THE PARKWAY
                 *
                 * DDM   ***** Preserved *****

2725             KK   R21A5
2726             RS       3    FLOW       0
2727             RC   0.035   0.035   0.035     378  0.0013
2728             RX       0       1      30      80     110     120     150     151
2729             RY       6       3       0       0       3       4       5       7
                 *
                 *
                 * *** DIVERSION RECOVER DR21A4  ******************************************
                 * RECOVER FLOWS FROM D21A4
```



```
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2730             KK  DR21A4
2731             DR   21A4I
                 *
                 * *** ROUTE R21A4 ************************************************************
                 * ROUTE R21A4 IS  860 FT WITH A SLOPE OF 0.007
                 * CROSS SECTION IS THE PARKWAY
                 *
                 * DDM   ***** Preserved *****

2732             KK   R21A4
2733             RS       6    FLOW       0
2734             RC   0.035    0.02   0.035     860   0.007
2735             RX       0       1      30      31      65      66      96      97
2736             RY       6       3     1.5       1       1     1.5       3       7
                 *
                 *
                 *

2737             KK   N21A6   BASIN
2738             BA    .020
2739             LG    0.25    0.35    2.65    1.40      30
2740             UC   0.304   0.288
2741             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2742             UA     100
                 *
                 * DDM   ***** Preserved *****
```

```
2743          KK   C21A6
2744          HC       2
              *
              * *** ROUTE R21A6 ************************************************************
              * ROUTE R21A6 IS  441 FT WITH A SLOPE OF 0.0023
              * CROSS SECTION IS THE PARKWAY
              *
              * DDM   ***** Preserved *****

2745          KK   R21A6
2746          RS       3    FLOW       0
2747          RC   0.035   0.035   0.035     441  0.0023
2748          RX       0       1      30      80     110     120     150     151
2749          RY       6       3       0       0       3       4       5       7
              *
              *
              *

2750          KK   N21A7   BASIN
2751          BA    .013
2752          LG    0.25    0.35    2.65    1.40      30
2753          UC   0.262   0.303
2754          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2755          UA     100
              *
              * *** ROUTE R21A7 ************************************************************
              * ROUTE R21A7 IS  1314 FT WITH A SLOPE OF 0.003
              * CROSS SECTION IS THE PARKWAY
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2756          KK   R21A7
2757          RS      10    FLOW       0
2758          RC   0.035   0.035   0.035    1314   0.003
2759          RX       0       1      30      80     110     120     150     151
2760          RY       6       3       0       0       3       4       5       7
              *
              *

2761          KK   N21A8   BASIN
2762          BA    .009
2763          LG    5.00    0.35    2.65    1.90       0
2764          UC   1.500   3.028
2765          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2766          UA     100
              *
              *
              * DDM   ***** Preserved *****

2767          KK   C21A8
2768          HC       4
              *
              * *** STORAGE L21A8 *********************************************************
              *  WEIR = 60'-15' WIDE (TOPO) WEIR ELEVATION = 1278 (TOPO)
              *  WEIR COEFF = 2.68
              *

2769          KK   L21A8
2770          RS       1    STOR       0
2771          SQ       0       4     161
2772          SE    1276    1278    1279
2773          SV       0   10.16    10.2
2774          SE    1276    1278    1279
              *
              *
              * *** ROUTE R21A8 ************************************************************
              * ROUTE R21A8 IS  1108 FT WITH A SLOPE OF 0.0072
              * CROSS SECTION IS THE PARKWAY
              *
              * DDM   ***** Preserved *****
```

```
2775          KK   R21A8
2776          RS      12    FLOW       0
2777          RC   0.035   0.035   0.035    1108  0.0072
2778          RX       0       1      30      80     110     120     150     151
2779          RY       6       3       0       0       3       4       5       7
              *
              *

2780          KK   N21A9   BASIN
2781          BA    .025
2782          LG    0.25    0.35    2.65    1.40      30
2783          UC   0.367   0.330
2784          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2785          UA     100
              *
              *
              * *** ROUTE R21A9 ************************************************************
              * ROUTE R21A9 IS  672 FT WITH A SLOPE OF 0.0074
              * CROSS SECTION IS THE PARKWAY
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE11(

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2786          KK   R21A9
2787          RS       4    FLOW       0
2788          RC   0.035   0.035   0.035     672  0.0074
2789          RX       0       1      30      80     110     120     150     151
2790          RY       6       3       0       0       3       4       5       7
              *
              *

2791          KK  N21A10   BASIN
2792          BA    .045
2793          LG    0.25    0.35    2.65    1.40      30
2794          UC   0.387   0.313
2795          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2796          UA     100
              *
              *

2797          KK  N21A11   BASIN
2798          BA    .015
2799          LG    0.22    0.35    2.65    1.74      10
2800          UC   0.504   0.609
2801          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2802          UA     100
              *
              *

2803          KK  N21A12   BASIN
2804          BA    .013
2805          LG    0.25    0.35    2.65    1.40      30
2806          UC   0.408   0.555
2807          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2808          UA     100
              *
              *
              * DDM   ***** Preserved *****

2809          KK  C21A11
2810          HC       5
              *
              * *** STORAGE L21A11 *********************************************************
              *
              * WEIR = 1270' (SURVEY) WEIR LENGTH >> 100 FT-25' WIDE  (TOPO)
              * WEIR COEFF = 2.68
              * 36" RCP DRAINS DETENTION BASIN IE=1267'
              *
              *

2811          KK  L21A11
2812          RS       1    STOR       0
```

```
2813          SQ       0      10      35     305
2814          SE    1267    1268    1270    1271
2815          SV       0    0.28    3.39     3.4
2816          SE    1267    1268    1270    1271
              *
              *
              * *** STORAGE L21A14 ***********************************************************
              *
              * THIS IS A SMALL DETENTION BASIN AFTER THE LARGE BASIN. ONCE THIS BASIN IS
              * FILLED, THE FLOW WILL RUN DOWN THE ROAD AND INTO R21A11
              * WEIR = 1270' WEIR LENGTH = 50'-25' WIDE
              * WEIR COEFFECIENT = 2.68
              * 36" RCP DRAINS DETENTION BASIN IE=1263'
              *
1                                          HEC-1 INPUT                                          PAGE111

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2817          KK  L21A14
2818          RS       1    STOR       0
2819          SQ       0      35      60      76     214     469
2820          SE    1264    1266    1268    1270    1271    1272
2821          SV       0     .09    0.26    1.06     1.1     1.1
2822          SE    1264    1266    1268    1270    1271    1272
              *
              * *** ROUTE R21A11 *************************************************************
              * ROUTE R21A11 IS  402 FT WITH A SLOPE OF 0.005
              * CROSS SECTION IS MAINLY A ROADSIDE CHANNEL WITH HOMES ON THE WEST SIDE
              *
              * DDM   ***** Preserved *****

2823          KK  R21A11
2824          RS       1    FLOW       0
2825          RC   0.035   0.035   0.035     402   0.005
2826          RX       0       1      21      31      36      46      66     166
2827          RY       8       4       3       0       0       3       4       6
              *
              *

2828          KK  N21A14   BASIN
2829          BA    .062
2830          LG    0.19    0.35    2.65    1.72       9
2831          UC   0.863   0.678
2832          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2833          UA     100
              *
              * DDM   ***** Preserved *****

2834          KK  C21A14
2835          HC       2
              *
              *

2836          KK  N21A13   BASIN
2837          BA    .021
2838          LG    0.25    0.35    2.65    1.40      30
2839          UC   0.346   0.318
2840          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2841          UA     100
              *
              *

2842          KK  N21A15   BASIN
2843          BA    .015
2844          LG    0.24    0.35    2.65    1.50      24
2845          UC   0.350   0.382
2846          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2847          UA     100
              *
              *
              * DDM   ***** Preserved *****
                                           HEC-1 INPUT                                          PAGE112

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
2848          KK  C21A15
2849          HC       3
              *
              * *** STORAGE L21A15 ********************************************************
              *
              * WEIR = 1261.3' (SURVEY)
              * WEIR COEFFECIENT = 2.7
              * WEIR LENGTH = 55'-40' WIDE (SURVEY)
              * 24" RCP DRAINS DETENTION BASIN IE=1255.7' (SURVEY)
              *

2850          KK  L21A15
2851          RS       1    STOR       0
2852          SQ       0      15      26     127     369
2853          SE    1256    1258    1260    1262    1263
2854          SV       0     0.5     2.3     5.3     5.4
2855          SE    1256    1258    1260    1262    1263
              *
              *

2856          KK  N21A17   BASIN
2857          BA    .011
2858          LG    0.23    0.35    2.65    1.61      18
2859          UC   0.512   0.841
2860          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2861          UA     100
              *
              * *** STORAGE L21A17 ********************************************************
              *
              * WEIR = 1261' (SURVEY)
              * WEIE COEFFECIENT = 2.68
              * WEIR LENGTH = 30'-20' WIDE (SURVEY)
              * 12" PVC DRAINS DETENTION BASIN IE=1255.4' (SURVEY)
              *

2862          KK  L21A17
2863          RS       1    STOR       0
2864          SQ       0       6       8      90
2865          SE    1256    1258    1260    1262
2866          SV       0    0.15    1.14    3.66
2867          SE    1256    1258    1260    1262
              *
              * DDM   ***** Preserved *****

2868          KK  C21A17
2869          HC       2
              *
              *
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2870          KK  N21A16   BASIN
2871          BA    .022
2872          LG    0.25    0.35    2.65    1.40      30
2873          UC   0.429   0.494
2874          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2875          UA     100
              *
              * *** STORAGE L21A16 ********************************************************
              *
              * WEIR = 1260' (SURVEY)
              * WEIR COEFFECIENT = 2.68
              * WEIR LENGTH = 100'-100' WIDE (SURVEY)
              * 3-24" RCP DRAINS BASIN IE=1255.1' (SURVEY)
              * VERY SMALL RETENTION AREA WITH LIKELY VERY LITTLE EFFECT
              *

2876          KK  L21A16
2877          RS       1    STOR       0
2878          SQ      12      60      84     367
2879          SE    1256    1258    1260    1261
```

```
2880          SV       0     0.1    0.31    0.35
2881          SE    1256    1258    1260    1261
              *
              *
              * DDM   ***** Preserved *****

2882          KK  C21A16
2883          HC       2
              *
              *
              * *** ROUTE R21A16 ************************************************************
              * ROUTE R21A16 IS  585 FT WITH A SLOPE OF 0.0034
              * CROSS SECTION IS MAINLY A ROADSIDE CHANNEL WITH HOMES ON THE WEST SIDE
              *
              * DDM   ***** Preserved *****

2884          KK  R21A16
2885          RS       2    FLOW       0
2886          RC   0.035   0.035   0.035     585  0.0034
2887          RX       0       1      11      27      31      47      57      67
2888          RY      13       5       4       0       0       4       5       9
              *
              *

2889          KK  N21A20   BASIN
2890          BA    .003
2891          LG    0.22    0.35    2.65    1.69      13
2892          UC   0.363   0.628
2893          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2894          UA     100
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE11

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2895          KK  C21A20
2896          HC       2
              *
              * *** STORAGE L21A20 ***********************************************************
              *
              * THERE ARE TWO WEIRS IN THIS LOCATION. THE NORTHERN MOST WEIR WAS THE
              * ONLY ONE ANALYZED BECAUSE OF THE STORAGE VOLUME BEHIND IT.
              * WEIR = 1258' WEIR LENGTH = 45'-20' WIDE  1-8" PVC DRAINS BASIN IE=1254.8'
              * WEIR COEFFECIENT = 2.7
              * VERY SMALL RETENTION AREA WITH LIKELY VERY LITTLE EFFECT (SUMP INLET)
              *

2897          KK  L21A20
2898          RS       1    STOR       0
2899          SQ       1       3     125     350
2900          SE    1256    1258    1259    1260
2901          SV       0    0.26     0.3     0.3
2902          SE    1256    1258    1259    1260
              *
              *

2903          KK  N21A18   BASIN
2904          BA    .026
2905          LG    0.25    0.35    2.65    1.40      30
2906          UC   0.450   0.456
2907          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2908          UA     100
              *
              *
              * DDM   ***** Preserved *****

2909          KK  C21A18
2910          HC       2
              *
              *
              * *** ROUTE R21A18 ************************************************************
              * ROUTE R21A18 IS 877 FT WITH A SLOPE OF 0.0091
              * CROSS SECTION IS I-101 CHANNEL
```

```
                 *
                 * DDM   ***** Preserved *****

2911             KK  R21A18
2912             RS       1    FLOW       0
2913             RC   0.035    0.02   0.035     877  0.0091
2914             RX       0       1      17      32      47      62      87     117
2915             RY      12       7       6       0       0       6       8      10
                 *
                 *
1                                          HEC-1 INPUT                                                    PAGE11

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2916             KK  N21A21   BASIN
2917             BA    .016
2918             LG    0.22    0.35    2.65    1.36      51
2919             UC   0.329   0.269
2920             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2921             UA     100
                 *
                 * *** STORAGE L21A21 ***********************************************************
                 *
                 * THERE ARE TWO PONDS IN THIS COMPLEX. THE WEST POND HAS VERY LITTLE RETENTION
                 * AREA. IF THE POND IS FULL, IT HAS NO RETENTION. IT SPILLS OVER INTO THE EAST
                 * POND AND THEN DRAINS TO THE SOUTH.
                 * WEIR = 1261.4' WEIR LENGTH = 45'-140' WIDE
                 * WEIR COEFFECIENT = 2.69
                 * VERY SMALL RETENTION AREA WITH LIKELY VERY LITTLE EFFECT
                 * THE WATER LEVEL IN THE LAKES IS = 1259.3, THE PONDS ARE FULL AT 1260.0
                 *

2922             KK  L21A21
2923             RS       1    STOR       0
2924             SQ       0       0      56     246
2925             SE  1259.3    1260    1262    1263
2926             SV       0     0.7    2.82    2.85
2927             SE  1259.3    1260    1262    1263
                 *
                 *

2928             KK  N21A92   BASIN
2929             BA    .006
2930             LG    0.06    0.35    2.65    1.71      83
2931             UC   0.442   1.371
2932             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2933             UA     100
                 *
                 *
                 *
                 *
                 * *** COMBINE  CN21A ************************************************************
                 * COMBINE  RN23AS C21A92
                 * Loop 101 AND 75th AVE
                 * DDM   ***** Preserved *****

2934             KK   CN21A
2935             HC       4    3.72
                 *
                 *
                 *
                 * *** ROUTE RN21A ***************************************************************
                 * ROUTE RN21A IS 3153 FT WITH A SLOPE OF 0.0057
                 * CROSS SECTION IS A MAN-MADE CHANNEL INTO THE NEW RIVER (MEASURED)
                 * ALONG freeway drainage CHANNEL
                 * ROUTE FLOW TO NEW RIVER (CN21) FROM 75th AVE (CN21A)
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE11

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2936             KK   RN21A
2937             RS       3    FLOW       0
```

```
2938          RC    0.04    0.03    0.04    3153  0.0057
2939          RX       0     100     150     162     182     194     244     394
2940          RY      16       6       6       0       0       6       7      11
              *
              *
              * DDM   ***** Preserved *****

2941          KK     N21   BASIN
2942          KM   SUB-BASIN N21
2943          KM   6-HOUR RAINFALL, PATTERN NO. 1.13 WAS USED TO FIND TC & R FOR THIS BASIN
2944          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .992
2945          KM     L =  .55  Kb = .045  Adj. Slope =   40.0
2946          BA    .622
2947          LG    0.26    0.22    4.60    0.39      31
2948          UC   0.962   0.570
2949          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2950          UA     100
              *
              *
              * *** COMBINE  CN21 ***********************************************************
              * COMBINE  RN21A, RN23, RN21C, AND N21
              * NEW RIVER AND BEARDSLEY RD Alignment
              * AREA hardcoded TO prevent doubleing OF areas
              * STORE HYDROGRAPH FOR LATER RETRIVAL
              * DDM   ***** Preserved *****

2951          KK    CN21
2952          KO       0       0       0       0      21
2953          HC       4   15.37
              *
              *
              * DDM   ***** Preserved *****

2954          KK    A09U   BASIN
2955          KM   SUB-BASIN A09U
2956          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
2957          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
2958          KM     L =  .68  Kb = .052  Adj. Slope =  300.2
2959          BA    .174
2960          LG    0.35    0.34    4.20    0.43      19
2961          UC   0.192   0.118
2962          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
2963          UA     100
              *
              *
              * *** DIVERSION DA09U ***********************************************************
              * Divesion MAIN (SOUTH), SPLIT (WEST) ALONG Happy Valley RD.
              *
              * 80% FLOW GOES DOWN 92ND AVE, 20% WEST ON HAPPY VALLEY
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE117

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2964          KK   DA09U
2965          DT   A09UI
2966          DI       0       1      10     100     200     400     800    1000    2000
2967          DQ       0      .2       2      20      40      80     160     200     400
              *
              *
              * *** ROUTE RA09US ***************************************************************
              * ROUTE RA09US IS 3928 FT WITH A SLOPE OF 0.0076
              * CROSS SECTION IS A SMALL ROAD WITH HOMES ON THE WEST SIDE
              * ALONG local STREETS
              * *** ROUTE FLOW TO CN11K FROM Happy Valley RD (CA09U)
              * DDM   ***** Preserved *****

2968          KK  RA09US
2969          RS      10    FLOW       0
2970          RC    0.04    0.03    0.04    3928  0.0076
2971          RX       0       1      54      55      95      96     124     624
2972          RY    9.25    1.25    0.25       0       0    0.25    1.25    3.25
              *
```

```
                *
                * DDM   ***** Preserved *****

2973            KK    N11N   BASIN
2974            KM   SUB-BASIN N11N
2975            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
2976            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
2977            KM     L =  .76  Kb = .049  Adj. Slope =  308.9
2978            BA    .265
2979            LG    0.33    0.31    4.45    0.38       5
2980            UC   0.204   0.108
2981            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
2982            UA     100
                *
                *
                * *** DIVERSION DN11N ***********************************************************
                * DIVERSION MAIN (SOUTH)ALONG 91st AVE, SPLIT (WEST)
                * DDM   ***** Preserved *****
                *
                * THE MAIN FLOW IS DIVERTED TO THE SOUTH. THE REMAINING FLOW IS ROUTED
                * TO THE WEST.
                *

2983            KK   DN11N
2984            DT   N11NI
2985            DI       0       1     118     355     591     709     827     945    1064
2986            DQ       0      .9     100     330     556     670     781     897    1009
                *
                *
                * *** ROUTE RN11NW  *************************************************************
                * ROUTE RN11NW IS 2521 FT WITH A SLOPE OF 0.0016
                * CROSS SECTION IS A SMALL ROAD WITH HOMES TO BOTH SIDES
                * ALONG Mariposa GrANDe
                * ROUTE FLOW TO CN11M FROM CN11N
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE11
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2987            KK  RN11NW
2988            RS      23    FLOW       0
2989            RC    0.04    0.03    0.04    2521  0.0016
2990            RX       0       1      70      71      96      97     182     183
2991            RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
                *
                *
                * DDM   ***** Preserved *****

2992            KK    N11O   BASIN
2993            KM   SUB-BASIN N11O
2994            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
2995            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
2996            KM     L =  .33  Kb = .059  Adj. Slope =   52.0
2997            BA    .054
2998            LG    0.35    0.35    4.50    0.36       0
2999            UC   0.246   0.170
3000            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3001            UA     100
                *
                * *** DIVERSION DN11O ***********************************************************
                * DIVERSION MAIN (SOUTH), SPLIT (WEST)
                * DIVERSION INFORMATION NEEDS TO CORRECTED
                *
                * THIS IS A FUTURE SPLIT. EXISTING CONDITIONS HAS A SMALL DITCH
                * TO THE WEST THAT CARRIES A MAX. FLOW OF 47 CFS.
                *
                * DDM   ***** Preserved *****

3002            KK   DN11O
3003            DT   N11OI
3004            DI       0      30      60     100     300     600    1200    2200
3005            DQ       0       3       6      10      30      47    47.1    47.2
                *
                *
```

```
                 * *** ROUTE RN11OS  ************************************************************
                 * ROUTE RN11OS IS 1184 FT WITH A SLOPE OF 0.0068
                 * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
                 * ALONG natural pathways
                 * ROUTE FLOW TO Mariposa GrANDe (CN11M) FROM CN11O
                 * DDM   ***** Preserved *****

3006             KK  RN11OS
3007             RS      16    FLOW       0
3008             RC    0.05     .06     .05    1184  0.0068
3009             RX       0     400     800    1200    1600    2000    2400    2800
3010             RY       3       1      .5       0       0      .5       1       3
                 *
                 *
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE11

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3011             KK    N11M   BASIN
3012             KM   SUB-BASIN N11M
3013             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3014             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
3015             KM     L =  .35  Kb = .055  Adj. Slope =   49.0
3016             BA    .100
3017             LG    0.35    0.35    4.15    0.44       0
3018             UC   0.250   0.127
3019             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3020             UA     100
                 *
                 *
                 * *** COMBINE  CN11M ***************************************************
                 * COMBINE BASIN N11M, RN11OS, RN11NW, AND RA09US
                 * Mariposa GrANDe AND 95st AVE
                 * DDM   ***** Preserved *****

3021             KK   CN11M
3022             HC       4    0.32
                 *
                 *
                 * *** DIVERSION DN11M ***********************************************************
                 * DIVERSION MAIN 95th AVE(SOUTH), SPLIT (WEST)
                 * DDM   ***** Preserved *****

3023             KK   DN11M
3024             DT   N11MI
3025             DI       0       1      40      80     100     300     600    1200    2200
3026             DQ       0     .25      10      20      25      75     150     184     184
                 *
                 *
                 * *** ROUTE RN11MS  *************************************************************
                 * ROUTE RN11MS IS 2689 FT WITH A SLOPE OF 0.0071
                 * CROSS SECTION IS A SMALL ROAD WITH HOMES TO ONE SIDE
                 * ALONG 95st AVE
                 * ROUTE FLOW TO PINNACLE PEAK (CN11J) FROM Mariposa GrANDe (CN11M)
                 * DDM   ***** Preserved *****

3027             KK  RN11MS
3028             RS      10    FLOW       0
3029             RC    0.05    0.03    0.05    2689  0.0071
3030             RX       0       1      50      51      73      74     124     524
3031             RY    9.25    1.25    0.25       0       0    0.25    1.25    3.25
                 *
                 *
                 * DDM   ***** Inserted *****

3032             KK    N11K   BASIN
3033             KM   SUB-BASIN N11K
3034             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3035             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
3036             KM     L =  .64  Kb = .051  Adj. Slope =   33.0
3037             BA    .186
3038             LG    0.29    0.29    4.25    0.44      12
1                                          HEC-1 INPUT                                          PAGE12(
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```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3039          UC   0.450   0.278
3040          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3041          UA     100
              *
              *
              * *** STORAGE ROUTING LN11K ***********************************************
              * *** SMALL SUBDIVISION STORAGE (ACCOUNTED) ******************************
              * DDM   ***** Preserved *****

3042          KK   LN11K
3043          DT  LN11KD     1.1
3044          DI       0     100    1000   10000
3045          DQ       0     100    1000   10000
              *
              *
              * *** DIVERSION RECOVER DRN11N ************************************************
              * RECALL THE DIVERTED FLOW FROM Mariposa GrANDe (DN11N)
              * DDM   ***** Preserved *****

3046          KK  DRN11N
3047          DR   N11NI
              *
              *
              * *** ROUTE RN11NS  ***********************************************************
              * ROUTE RN11NS IS 2645 FT WITH A SLOPE OF 0.0083
              * CROSS SECTION IS A SMALL ROAD WITH HOMES TO ONE SIDE
              * ALONG 91st AVE
              * ROUTE FLOW TO PINNACLE PEAK (CN11K) FROM Mariposa GrANDe (CN11N)
              * DDM   ***** Preserved *****

3048          KK  RN11NS
3049          RS       6    FLOW       0
3050          RC    0.05    0.04     .05    2645  0.0083
3051          RX       0       1      51      52      82      83     108     608
3052          RY    9.25    1.25    0.25       0       0    0.25    1.25    3.75
              *
              *
              * *** COMBINE CN11K ***********************************************************
              * COMBINE BASIN N11K AND RN11NS
              * PINNACLE PEAK AND 91st AVE
              * DDM   ***** Preserved *****

3053          KK   CN11K
3054          HC       2    0.45
              *
              *
              * *** DIVERSION DN11K **********************************************************
              *
              * THIS IS A FUTURE DIVERSION. MOST OF THE FLOW WILL CONTINUE SOUTH IN
              * THE EXISTING MODEL.
              *
              * FUTURE - DIVERSION MAIN PINNACLE PEAK (WEST), SPLIT 91 AVE (SOUTH)
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3055          KK   DN11K
3056          DT   N11KI
3057          DI       0       1     118     355     591     709
3058          DQ       0      .9     108     353     587     694
              *
              *
              * *** ROUTE RN11KW  ***********************************************************
              * ROUTE RN11KW IS 2933 FT WITH A SLOPE OF 0.0068
              * CROSS SECTION IS A SMALL ROAD
              * ALONG PINNACLE PEAK RD.
              * ROUTE FLOW TO 95th AVE (CN11J) FROM 91st AVE (CN11K)
              * DDM   ***** Preserved *****

3059          KK  RN11KW
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```
3060          RS      16    FLOW       0
3061          RC    0.05    0.04     .05    2933  0.0068
3062          RX       0     200     225     226     250     251     276     476
3063          RY    4.25    2.25    0.25       0       0    0.25    2.25    4.25
              *
              * DDM   ***** Updated *****

3064          KK    N11J   BASIN
3065          KM   SUB-BASIN N11J
3066          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3067          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
3068          KM     L =  .56  Kb = .050  Adj. Slope =   36.0
3069          BA    .244
3070          LG    0.30    0.25    4.10    0.49      10
3071          UC   0.379   0.177
3072          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3073          UA     100
              *
              *
              * *** STORAGE ROUTING LN11J ***********************************************
              * *** SMALL SUBDIVISION STORAGE (ACCOUNTED) ******************************
              * DDM   ***** Preserved *****

3074          KK   LN11J
3075          DT  LN11JD     1.8
3076          DI       0     100    1000   10000
3077          DQ       0     100    1000   10000
              *
              *
              *
              * *** COMBINE CN11J  ***********************************************************
              * COMBINE N11J AND RN11KW
              * Pinacle Peak AND 95st AVE
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE12:

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3078          KK   CN11J
3079          HC       3     .56
              *
              *
              * *** DIVERSION DN11J ***********************************************************
              * DIVERSION MAIN (SOUTH), SPLIT PINNACLE PEAK (WEST)
              *
              * ALL FLOW SOUTH EXCEPT THE CAPACITY OF PINNACLE PEAK (30 CFS)
              *
              * DDM   ***** Preserved *****

3080          KK   DN11J
3081          DT   N11JI
3082          DI       0       1      40      80     100     300     600    1200    2200
3083          DQ       0     .25      10      20      25      30      30      30      30
              *
              *
              * *** ROUTE RN11JS  *************************************************************
              * ROUTE RN11JS IS 5670 FT WITH A SLOPE OF 0.0062
              * CROSS SECTION IS A SMALL NATURAL WASH
              * ALONG NATURAL WASH
              * ROUTE FLOW TO DEER VALLEY RD. (CN11G) FROM PINNACLE PEAK (CN11J)
              * DDM   ***** Preserved *****

3084          KK  RN11JS
3085          RS      14    FLOW       0
3086          RC    0.05    0.06    0.05    5670  0.0062
3087          RX       0     350     450     480     482     510     610     910
3088          RY       7       6       5       1       0       5       6       7
              *
              *
              * DDM   ***** Updated *****

3089          KK    N11G   BASIN
3090          KM   SUB-BASIN N11G
3091          KM   6-HOUR RAINFALL, PATTERN NO. 1.03 WAS USED TO FIND TC & R FOR THIS BASIN
```

```
3092          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .993
3093          KM     L = 1.06  Kb = .045  Adj. Slope =   32.0
3094          BA    .523
3095          LG    0.35    0.35    4.35    0.40       0
3096          UC   0.592   0.313
3097          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3098          UA     100
              *
              *
              * *** COMBINE  CN11G ***************************************************
              * COMBINE  CN11J AND N11G
              * Pinnacle PeakRd. EAST OF 99th AVE alignment
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE12

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3099          KK   CN11G
3100          HC       2
              *
              *
              * *** DIVERSION DN11G ***********************************************************
              * DIVERSION MAIN (SOUTH), SPLIT (WEST)
              *
              * FUTURE DIVERSION : ALL FLOW SOUTH FOR EXISTING CONDITIONS
              *
              * DDM   ***** Preserved *****

3101          KK   DN11G
3102          DT   N11GI
3103          DI       0       1      40      80     100     300     600    1200    2200
3104          DQ       0     .01     .02     .03     .04     .05     .06     .07     .08
              *
              *
              * *** ROUTE RN11GS  *************************************************************
              * ROUTE RN11GS IS 2875 FT WITH A SLOPE OF 0.0056
              * CROSS SECTION IS A SMALL NATURAL WASH
              * ALONG NATURAL WASH
              * ROUTE FLOW TO CN11F FROM CN11G
              * DDM   ***** Preserved *****

3105          KK  RN11GS
3106          RS       6    FLOW       0
3107          RC    0.05     .06     .05    2875  0.0056
3108          RX       0     350     450     480     482     510     610     910
3109          RY       7       6       5       1       0       5       6       7
              *
              *
              * DDM   ***** Preserved *****

3110          KK    N11F   BASIN
3111          KM   SUB-BASIN N11F
3112          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3113          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
3114          KM     L =  .60  Kb = .050  Adj. Slope =   30.0
3115          BA    .244
3116          LG    0.35    0.35    4.45    0.37       0
3117          UC   0.417   0.208
3118          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3119          UA     100
              *
              *
              * *** COMBINE  CN11F ***************************************************
              * COMBINE  CN11G AND CN11F
              * Lake Pleasant Pkwy WEST OF 99th AVE Alignment
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE124

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3120          KK   CN11F
3121          HC       2
              *
```

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                 *
                 * *** ROUTE RN11F ********************************************************
                 * ROUTE RN11F IS 3754 FT WITH A SLOPE OF 0.0035
                 * CROSS SECTION IS MAN-MADE CHANNEL THROUGH A SUBDIVISION (MEASURED)
                 * ALONG SUBDIVISION CHANNEL
                 * ROUTE FLOW TO DETENTION BASIN (CN11C) FROM Lake Pleasant Pkwy (CN11F)
                 * DDM   ***** Preserved *****

3122             KK   RN11F
3123             RS       9    FLOW       0
3124             RC    0.04    0.04    0.04    3754   .0035
3125             RX       0       1      50      92     122     164     214     215
3126             RY      13       5       4       0       0       4       5      13
                 *
                 *
                 * DDM   ***** Preserved *****

3127             KK    N11C   BASIN
3128             KM   SUB-BASIN N11C
3129             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3130             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
3131             KM     L =  .82  Kb = .045  Adj. Slope =   24.0
3132             BA    .255
3133             LG    0.22    0.27    4.45    0.41      24
3134             UC   0.512   0.327
3135             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3136             UA     100
                 *
                 *
                 * *** STORAGE ROUTING LN11C ***********************************************
                 * *** PARKRIDGE ESTATES RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
                 * DDM   ***** Preserved *****

3137             KK   LN11C
3138             DT  LN11CD    12.7
3139             DI       0     100    1000   10000
3140             DQ       0     100    1000   10000
                 *
                 * *** COMBINE  CN11C ******************************************************
                 * COMBINE  CN11F AND N11C
                 * Upstream FROM DETENTION BASIN near Bearsley RD AND 95th AVE

3141             KK   CN11C
3142             HC       2
                 *
                 *
                 * *** DIVERSION DN11CW ****************************************************
                 * DIVERSION FROM MAIN CHANNEL TO WEST BASIN MAIN (CHANNEL), SPLIT (BASIN)
                 * FROM SUBDIVISION report (Parkridge report No. 40)
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                    PAGE12
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3143             KK  DN11CW
3144             DT  N11CWI
                 * EL   0       2     2.5       3     3.5    3.75     3.9       x
3145             DI       0     175     400     600     750     900     986    2000
3146             DQ       0       0     2.5      26      64    93.4   110.7     120
                 *
                 *
                 * *** DIVERSION DN11CE ****************************************************
                 * DIVERSION FROM MAIN CHANNEL TO EAST BASIN. MAIN (CHANNEL), SPLIT (BASIN)
                 * FROM SUBDIVISION report (Parkridge report No. 40)
                 * DDM   ***** Preserved *****

3147             KK  DN11CE
3148             DT  N11CEI
                 * EL   0       1     1.5       2     2.5       3     3.5    3.75     3.9       x
3149             DI       0       7      50     175   397.5     574     686   806.6     875     200
3150             DQ       0       7       8    12.7    16.6    20.3    23.3    28.6    32.5      35
                 *
                 *
                 * *** DIVERSION RECOVER DRN11C ********************************************
```

```
                * RECALL THE DIVERTED FLOW FROM WEST RETENTION BASIN (DN11CW)

3151            KK  DRN11C
3152            DR  N11CWI
                *
                *
                * *** STORAGE LN11Cw ***********************************************************
                * WEST BASIN sTOrage FROM SUBDIVISION report (Parkridge report no. 40)
                * DDM   ***** Preserved *****

3153            KK  LN11CW
3154            RS       1    STOR      -1
3155            SA    2.55    2.77    2.98     3.2    3.45     3.5
3156            SE       0       1       2       3       4       5
3157            SQ       0       2     3.3       5       5    5000
                *
                *
                * *** DIVERSION RECOVER DR11C* **************************************************
                * RECALL THE DIVERTED FLOW FROM EAST RETENTION BASIN (DN11CE)
                * DDM   ***** Preserved *****

3158            KK  DR11C*
3159            DR  N11CEI
                *
                *
                * *** STORAGE LN11CE ************************************************************
                * EAST BASIN sTOrage FROM SUBDIVISION report (Parkridge report no. 40)
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE12

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3160            KK  LN11CE
3161            RS       1    STOR      -1
3162            SA       0   .7657    3.91    4.61    4.86    5.11     5.2
3163            SE       0     0.5       1       2       3       4       5
3164            SQ       0       2     3.3       5       5       5    5000
                *
                *
                * *** COMBINE  CN11C* ***********************************************************
                * COMBINE  CN11C AND LN11C
                * Downstream FROM DETENTION BASIN, Includes overFLOW FROM both basins
                * DDM   ***** Preserved *****

3165            KK  CN11C*
3166            HC       3
                *
                *
                * *** DIVERSION RECOVER DRN11K  *************************************************
                * RECOVER DIVERTED FLOW FROM PINNACLE PEAK (CN11K)
                * DDM   ***** Preserved *****

3167            KK  DRN11K
3168            DR   N11KI
                *
                *
                * *** ROUTE RN11KS  *************************************************************
                * ROUTE RN11KS IS 5301 FT WITH A SLOPE OF 0.0066
                * CROSS SECTION IS A SMALL ROAD WITH HOMES ON THE WEST SIDE
                * SOUTH ALONG 91st Avenue
                * *** ROUTE FLOW TO BEARDSLEY RD. (CN11G) FROM PINNACLE PEAK (CN11J)
                * DDM   ***** Preserved *****

3169            KK  RN11KS
3170            KO       3
3171            RS      12    FLOW       0
3172            RC    0.05    0.04    0.05    5301   .0066
3173            RX       0       1      31      32      62      63      88     588
3174            RY    9.25    1.25    0.25       0       0    0.25    1.25    3.75
                *
                *
                * ** DIVERSION DX5 **************************************************************
                * DIVERSION MAIN 91st AVE(SOUTH), SPLIT BEARDSLEY RD(WEST)
                * DDM   ***** Preserved *****
```

```
                 *
                 * MOST OF THE FLOW WILL CONTINUE SOUTH ON 91ST AVE
                 * MAX OF 50 CFS TO THE WEST
                 *

3175             KK     DX5
3176             DT     X5I
3177             DI       0      10     100     200     300     400     500    1000    2000
3178             DQ       0       8      70     165     260     355     450     950    1950
                 *
                 *
                 * *** ROUTE RX5W  ***********************************************************
                 * ROUTE RX5W IS 1292 FT WITH A SLOPE OF 0.0008
                 * CROSS SECTION IS DIRT ROAD
                 * WEST ALONG DEER VALLEY RD
                 * ROUTE FLOW FROM 91st AVE. (CN11H) TO WEST OF 91st AVE (CX5)
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE12

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3179             KK    RX5W
3180             RS      19    FLOW       0
3181             RC    0.05   0.045    0.05    1292   .0008
3182             RX       0     200     225     250     270     295     320     520
3183             RY    4.25    2.25    1.25       0       0    1.25    2.25    4.25
                 *
                 * DDM   ***** Updated *****

3184             KK    N11H   BASIN
3185             KM   SUB-BASIN N11H
3186             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3187             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .994
3188             KM     L = 1.04  Kb = .089  Adj. Slope =   32.0
3189             BA    .438
3190             LG    0.35    0.35    4.50    0.36       0
3191             UC   0.583   0.336
3192             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3193             UA     100
                 *
                 *
                 * *** COMBINE  CN11H ********************************************************
                 * COMBINE RX5W AND BASIN N11H
                 * Deer Valley Rd west of 91st Ave
                 * DDM   ***** Preserved *****

3194             KK   CN11H
3195             HC       2
                 *
                 *
                 * *** ROUTE RN11HW ***********************************************************
                 * ROUTE RN11HW IS 3854 FT WITH A SLOPE OF 0.0042
                 * CROSS SECTION IS A DITCH WITH HOMES TO THE WEST SIDE
                 * along channel and detention basins in sub-division
                 * ROUTE FLOW TO CN11D FROM CN11H
                 *
                 * DDM   ***** Preserved *****

3196             KK  RN11HW
3197             RS      10    FLOW       0
3198             RC    0.05     .06     .05    3854   .0042
3199             RX       0       1      26      34      38      46     146     546
3200             RY      10       2       2       0       0       2       4       5
                 *
                 *
                 * DDM   ***** Preserved *****

3201             KK    N11D   BASIN
3202             KM   SUB-BASIN N11D
3203             KM   6-HOUR RAINFALL, PATTERN NO. 1.01 WAS USED TO FIND TC & R FOR THIS BASIN
3204             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .993
3205             KM     L = 1.47  Kb = .029  Adj. Slope =   20.0
3206             BA    .511
3207             LG    0.13    0.33    4.60    0.30      14
```

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3208          UC   0.617   0.432
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3209          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3210          UA     100
              *
              *
              * *** STORAGE ROUTING LN11D ***********************************************
              * *** DOVE VALLEY RANCH RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
              * DDM   ***** Preserved *****

3211          KK   LN11D
3212          DT  LN11DD    31.2
3213          DI       0     100    1000   10000
3214          DQ       0     100    1000   10000
              *
              *
              * *** COMBINE LN11D*  ********************************************************
              * COMBINE BASIN N11D AND LN11H*
              * DDM   ***** Preserved *****

3215          KK  LN11D*
3216          HC       2
              *
              *
              * *** DIVERSION RECALL DR5S  **************************************************
              * RECALL THE DIVERTED FLOW FROM CX5
              * DDM   ***** Preserved *****

3217          KK    DRX5
3218          DR     X5I
              *
              * *** ROUTE RX5S  *******************************************************
              * ROUTE RX5S IS 5270 FT WITH A SLOPE OF 0.0059
              * CROSS SECTION IS SMALL ROAD WITH HOMES ON BOTH SIDES
              * ALONG 91st AVE
              * ROUTE FLOW TO BEARDSLEY RD. (CX5) FROM DEER VALLEY RD (CX51)
              * DDM   ***** Preserved *****

3219          KK    RX5S
3220          RS       9    FLOW       0
3221          RC    0.04    0.04    0.04    5270  0.0059
3222          RX       0       1      20      21      51      52     272     273
3223          RY      11       3    0.25       0       0    0.25    3.25      10
              *
              *
              * DDM   ***** Preserved *****

3224          KK    N11I   BASIN
3225          KM   SUB-BASIN N11I
3226          KM   6-HOUR RAINFALL, PATTERN NO. 1.12 WAS USED TO FIND TC & R FOR THIS BASIN
3227          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .992
3228          KM     L = 1.04  Kb = .043  Adj. Slope =   32.0
3229          BA    .617
3230          LG    0.25    0.26    5.80    0.22      24
3231          UC   0.529   0.248
3232          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3233          UA     100
              *
              *
              * *** DIVERSION RECOVER DRN11L  ***********************************************
              * RECOVER DIVERTED FLOW FROM PINNACLE PEAK (CN11L)
              * DDM   ***** Preserved *****
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```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3234          KK  DRN11L
3235          DR   N11LI
              *
              *
              * *** ROUTE RN11LS *******************************************************
```

```
                * ROUTE RN11LS IS 5321 FT WITH A SLOPE OF 0.0064
                * CROSS SECTION IS SMALL ROAD WITH HOMES ON BOTH SIDES
                * ALONG 87th AVE
                * ROUTE FLOW TO DEER VALLEY (CN11I) FROM PINNACLE PEAK (CN11L)
                * DDM   ***** Preserved *****

3236            KK  RN11LS
3237            RS      9    FLOW       0
3238            RC   0.04    0.03    0.04    5321  0.0064
3239            RX      0       1      20      21      51      52     145     146
3240            RY     10       2    0.25       0       0    0.25    1.25      10
                *
                *
                * *** DIVERSION RECOVER DRN22A  ***********************************************
                * RECOVER DIVERTED FLOW FROM CN22A
                * DDM   ***** Preserved *****

3241            KK  DRN22A
3242            DR   N22AI
                *
                *
                * *** ROUTE RN22AW ******************************************************
                * ROUTE RN22AW IS 1304 FT WITH A SLOPE OF 0.0008
                * CROSS SECTION IS SMALL ROAD WITH FENCE TO THE WEST SIDE
                * WEST ALONG DEER VALLEY Road
                * ROUTE FLOW TO 87th AVE (CN11I) FROM CN22A
                * DDM   ***** Preserved *****

3243            KK  RN22AW
3244            RS      9    FLOW       0
3245            RC   0.04    0.03    0.04    1304   .0008
3246            RX      0       1      71      72     107     108     133     633
3247            RY     10     2.5    0.25       0       0    0.25    1.25    3.75
                *
                *
                * *** COMBINE  CN11I ****************************************************
                * COMBINE  CN11L, N11I, AND RN22AW
                * INTERSECTION OF 87th AVE AND DEER VALLEY Road
                * DDM   ***** Preserved *****

3248            KK   CN11I
3249            HC      3     1.3
                *
                *
                * *** DIVERSION DN11I ***************************************************
                * DIVERSION MAIN (EAST PATH), SPLIT (WEST PATH)
                *
                * 50% FLOW ON 87TH AND 50% FLOW ON 89TH
                *
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE13(

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3250            KK   DN11I
3251            DT   N11II
3252            DI      0       1      30      60     100     300     600    1200    2200
3253            DQ      0      .5      15      30      50     150     300     600    1100
                *
                *
                * *** ROUTE RN11IS ******************************************************
                * ROUTE RN11IS IS 3110 FT WITH A SLOPE OF 0.0051
                * CROSS SECTION IS A LARGE DITCH ON THE EAST SIDE (MEASURED)
                * SOUTH ON 87th AVE
                * ROUTE FLOW TO BEARDSLEY RD (CN11E) FROM DEER VALLEY RD (CN11I)
                * DDM   ***** Preserved *****

3254            KK  RN11IS
3255            RS      5    FLOW       0
3256            RC   0.04    0.04    0.04    3110  0.0051
3257            RX      0      20      50      60      70      80      90     250
3258            RY     10       8       8       7       0       0       7      10
                *
                *
```

```
                *
                * *** DIVERSION RECOVER DRN11I  ***********************************************
                * RECOVER diverded FLOW FROM  DEER VALLEY RD (CN11I)
                * DDM   ***** Preserved *****

3259            KK  DRN11I
3260            DR   N11II
                *
                *
                * *** ROUTE RN11IW  ****************************************************
                * ROUTE RN11IW IS 4147 FT WITH A SLOPE OF 0.0039
                * CROSS SECTION IS MAN-MADE CHANNEL WITH HOMES ON BOTH SIDES
                * SOUTH ALONG local STREETS
                * ROUTE FLOW TO BEARDSLEY RD (CN11E) FROM DEER VALLEY RD (CN11I)
                * DDM   ***** Preserved *****

3261            KK  RN11IW
3262            RS      17    FLOW       0
3263            RC    0.04    0.04    0.04    4147  0.0039
3264            RX       0       1      21      41      61     113     133     134
3265            RY      12       4       0       0       4       4       5      12
                *
                *
                * *** COMBINE  CX50 ***************************************************
                * COMBINE  RN11IW AND RN11IS
                * DETENTION BASINS AT LAKE PLEASANT PARKWAY
                * DDM   ***** Preserved *****

3266            KK    CX50
3267            HC       2
                *
                * *** Route RN11IW empties into a retention basin at the south end of
                * *** the Deer Village development which combines with a retention basin
                * *** that collects flow from RN11IS. The information for the stage-storage
                * *** of the retention basin was obtained from the Deer Village Final Drainage
                * *** Report (#34 in Data Collection Log) and the Westbrook Village East
                * *** Drainage Study (#85 in Data Collection Log).
                *
                *
                                          HEC-1 INPUT                                    PAGE131

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3268            KK    LX50
3269            RS       1    STOR       0
3270            SQ     144    1900    2956
3271            SE  1253.4  1259.9  1263.9
3272            SV       0   22.73    53.9
3273            SE  1253.4  1259.9  1263.9
                *
                *
                * *** DIVERSION DX50 ***************************************************
                * DIVERSION MAIN (EAST PATH), SPLIT (WEST PATH)
                *
                * THE TWO OUTLETS OF THE LAKE PLEASANT PARK DETENTION BASIN
                *
                * DDM   ***** Preserved *****

3274            KK    DX50
3275            DT   DX50I
3276            DI       0       1     127    1856    2932
3277            DQ       0       1     127    1296    1180
                *
                *
                * *** ROUTE RX50E ******************************************************
                * ROUTE RX50E IS 2549 FT WITH A SLOPE OF 0.0031
                * CROSS SECTION IS A LARGE DITCH (MEASURED)
                *
                * ROUTE FLOW TO BEARDSLEY RD (LN11E) FROM THE LAKE PLEASANT DETENTION BASIN
                * DDM   ***** Preserved *****

3278            KK   RX50E
3279            RS       7    FLOW       0
3280            RC    0.04    0.04    0.04    2549  0.0031
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3281          RX       0     200     300     325     345     395     500     700
3282          RY      10       9     7.3       0       0     7.3       9      10
              *
              * DDM   ***** Preserved *****

3283          KK     N22   BASIN
3284          KM   SUB-BASIN N22
3285          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3286          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .994
3287          KM     L = 1.28  Kb = .060  Adj. Slope =   20.0
3288          BA    .474
3289          LG    0.32    0.09   10.10    0.05      16
3290          UC   0.892   0.608
3291          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3292          UA     100
              *
              *
              * *** STORAGE ROUTING LN22  ***********************************************
              * *** SILVERTON RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ***************
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE13

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3293          KK    LN22
3294          DT   LN22D    32.0
3295          DI       0     100    1000   10000
3296          DQ       0     100    1000   10000
              *
              *
              *
              * *** COMBINE  CN22 ***********************************************************
              * COMBINE  BASIN N22 AND RN11IS
              * WETBROOK VILLAGE EAST - EAST INLET
              * DDM   ***** Preserved *****

3297          KK    CN22
3298          HC       2
              *
              *
              * *** DIVERSION DN22 **********************************************************
              * DIVERSION MAIN BEARDSLEY RD(WEST), SPLIT (TO DETEN. BASIN)
              * WESTBROOK VILLAGE EAST - EAST INLET CAN TAKE ONLY 500 CFS ADDITIONAL FLOW
              * IS DIRECTED TO THE WEST INLET IN AN EQUALIZATION CHANNEL
              *
              *
              *
              * DDM   ***** Preserved *****

3299          KK    DN22
3300          DT    N22I
3301          DI       0      30      60     100     300     500     600    1000    2000
3302          DQ       0      30      60     100     300     500     500     500     500
              *
              *
              * *** ROUTE RN22W *************************************************************
              * ROUTE RN22W IS 1764 FT WITH A SLOPE OF 0.0023
              * CROSS SECTION IS A ROAD WITH A WALL TO THE WEST SIDE ORCHARD TO THE RIGHT
              * ON EQUALIZATION CHANNEL ALONG BEARDSLEY RD
              * ROUTE FLOW TO WESTBROOK VILLAGE EAST WEST INLE (CN11E) FROM EAST INLET (CN22)
              * DDM   ***** Preserved *****

3303          KK   RN22W
3304          RS       9    FLOW       0
3305          RC    0.04    0.03    0.06    1764  0.0023
3306          RX       0       1      34      69     119     144     244     544
3307          RY      10     2.5       0     2.5     2.5     3.5     4.5     5.5
              *
              *
              * *** DIVERSION RECOVER DRX50I  ***********************************************
              * RECOVER diverded FLOW FROM LAKE PLEASANT DETENTION BASIN
              * DDM   ***** Preserved *****
                                           HEC-1 INPUT                                          PAGE13
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3308          KK  DRX50I
3309          DR   DX50I
              *
              *
              * *** ROUTE RX50W ************************************************************
              * ROUTE RX50W IS 2586 FT WITH A SLOPE OF 0.0046
              * CROSS SECTION IS A LARGE DITCH (MEASURED)
              *
              * ROUTE FLOW TO WESTBROOK VILLAGE EAST WEST INLE (CN11E) FROM EAST INLET (CN22)
              * DDM   ***** Preserved *****

3310          KK   RX50W
3311          RS       6    FLOW       0
3312          RC    0.04    0.04    0.04    2586  0.0046
3313          RX       0     200     300     330     390     420     620     820
3314          RY      10       8       5       0       0       5       8      10
              *
              *
              * DDM   ***** Preserved *****

3315          KK    N11E   BASIN
3316          KM   SUB-BASIN N11E
3317          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3318          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .994
3319          KM     L = 1.16  Kb = .046  Adj. Slope =   24.0
3320          BA    .490
3321          LG    0.25    0.25    5.80    0.22      30
3322          UC   0.617   0.366
3323          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3324          UA     100
              *
              *
              * *** STORAGE ROUTING LN11E ***********************************************
              * *** DEER VILLAGE RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ************
              * DDM   ***** Preserved *****

3325          KK   LN11E
3326          DT  LN11ED    32.0
3327          DI       0     100    1000   10000
3328          DQ       0     100    1000   10000
              *
              *
              * *** COMBINE  CN11E ******************************************************
              * COMBINE BASIN N11E, RN11IW, RN22W
              * DDM   ***** Preserved *****

3329          KK   CN11E
3330          HC       3    1.79
              *
              *
              * *** DIVERSION DN11E *****************************************************
              * DIVERSION MAIN (WEST), SPLIT (TO WESTBROOK VILLAGE DETEN. BASIN)
              * Capacity OF THE CHANNEL inTO Westbroock Village is 500cfs additional FLOW
              * was assumed TO FLOW WEST TOWARDS 91ST AVE
              *
              *
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                    PAGE13

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3331          KK   DN11E
3332          DT   N11EI
3333          DI       0       1      30      60     100     300     500     600    1000    2000
3334          DQ       0    .999   29.99   59.99   99.99  299.99  499.99     500     500     500
              *
              *
              * *** ROUTE RN11EW  ******************************************************
              * ROUTE RN11EW IS 1192 FT WITH A SLOPE OF 0.0008
              * CROSS SECTION IS A ROAD WITH A DITCH ON WEST SIDE (MEASURED)
```

```
* WEST ALONG BEARDSLEY Road
* ROUTE FLOW TO 91st AVE (CX1) FROM CN11E
* DDM   ***** Preserved *****

KK  RN11EW
RS       6    FLOW       0
RC    0.04    0.04    0.04    1192  0.0008
RX       0       1      34      69     119     144     244    1000
RY      10     2.5       0     2.5     2.5     3.5     4.5      10
*
*
* *** COMBINE  CX1 ************************************************************
* COMBINE RN11EW AND RX5S
* INTERSECTION OF BEARDSLEY RD AND 91st AVE
* DDM   ***** Preserved *****

KK     CX1
HC       2    2.24
*
*
* *** DIVERSION DX1 ***********************************************************
* DIVERSION SPLIT SOUTH ALONG 91ST AVE
* MAIN WEST ALONG BEARSLEY RD, SPLIT SOUTH ALONG 91ST AVE (MOST OF FLOW SOUTH)
*
* FUTURE DIVERSION: EXISTING CONDITIONS ALL FLOW TO THE SOUTH
*
* DDM   ***** Preserved *****

KK     DX1
DT     X1I
DI       0      30      60     100     300     500    1000    2000
DQ       0      30      60      99     298     497     996    1995
*
*
* *** ROUTE RX1W  *************************************************************
* ROUTE RX1W IS 2475 FT WITH A SLOPE OF 0.0008
* CROSS SECTION IS A ROAD WITH DITCHES ON BOTH SIDES
* WEST ALONG BEARDSLEY RD.
* *** ROUTE FLOW TO CN11D FROM CX1
* DDM   ***** Preserved *****
                                HEC-1 INPUT                                    PAGE135

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


KK    RX1W
RS       1    FLOW       0
RC    0.04    0.04    0.04    2475  0.0008
RX       0       1      21      41      81     131     181     182
RY      14       6       2       6       6       0       6      14
*
*
* *** COMBINE  CN11D ******************************************************
* COMBINE RX1W, CN11C, AND LN11H
* WESTBROOK VILLAGE WEST INLET (BEARDSLEY RD WEST OF 91ST AVE)
* DDM   ***** Preserved *****

KK   CN11D
HC       3    2.97
*
*
* ***************************************************************************
* ***************************************************************************
* *** THIS PORTION OF THE MODEL WAS COPIED FROM THE                       ***
* *** HEC-1 MODEL FROM THE DESERT AMETHYST DRAINAGE PROJECT               ***
* *** BY WOOD, PATEL & INC. 5/4/99 FOR THE 60% DESIGN LEVEL.              ***
* *** ORIGINAL MODEL WAS DEVELOPED BY THE FCDMC, 1991                     ***
* ***************************************************************************
* ***************************************************************************
* ************************* WEST WESTBROOK VILLAGE GOLF COURSE ******************
* ***************************************************************************
* ***************************************************************************
*
* *** ROUTE RWBW1 *************************************************************
* ROUTE FLOW TO CWBW FROM CN11C (CPB7) (THRU WESTBROOK VILLAGE GC)
```

```
3353          KK   RWBW1
3354          RS       3    FLOW      -1
3355          RC     .03     .02     .03    5280   .0050
3356          RX       0      30      60      90     190     300     330     360
3357          RY     104     103     101     100     100     101     103     104
              *
              *
              * *** BASIN WBW ***************************************************************
              * RUN OFF FROM WESTBROOK GC PARCELS 1-28 ( 23% OF AREA)
              * DDM   ***** Preserved *****

3358          KK     WBW
3359          BA    1.00
3360          LG     .35     .25     3.5     .28      30
3361          UC    1.00     .85
3362          UA       0       3       5       8      12      20      43      75      90      96
3363          UA     100
              *
              *
              * *** COMBINE CWBW *************************************************************
              * COMBINE PARCELS WBW AND RWBW1
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3364          KK    CWBW
3365          HC       2
              *
              *
              * *** STORAGE RBWB *************************************************************
              * STORAGE ROUTING TO GOLF COURSE FROM CWBW
              * STORAGE CAPACITY OF 472 AC-FT ASSUMED MAXIMUM 350 AC-FT (UDC REPORT 1983)
              * DDM   ***** Preserved *****

3366          KK    RBWB
3367          RS       1    STOR       0
3368          SV       0      50     100     150     200     300     350     400     500     501
3369          SE      26      27      28      29      30      32      34      36      38    38.2
3370          SQ       0      25      25      25      25      25      25     300     400    2000
              *
              *
              * *** ROUTE RWBW2 **************************************************************
              * ROUTE FLOW TO CN11B (91ST AVE) FROM CWBW (WEST WESTBROOK VILLAGE)
              * ALONG UNION HILLS RD
              * DDM   ***** Preserved *****

3371          KK   RWBW2
3372          RS       3    FLOW      -1
3373          RC     .03     .02     .03    5280   .0050
3374          RX       0      30      60      90     190     300     330     360
3375          RY     104     103     101     100     100     101     103     104
              *
              *
              * ****************************************************************************
              * *** END OF COPIED CODE FROM WOOD, PATEL & INC.'S DESERT AMATHYST MODEL     ***
              * ****************************************************************************
              * ****************************************************************************
              *
              *
              * *** DIVERSION RECOVER DRN11E  ************************************************
              * RECOVER diverded FLOW AT WEST INLET OF EAST WESTBROOK VILLAGE (CN11E)
              * DDM   ***** Preserved *****

3376          KK  DRN11E
3377          DR   N11EI
              *
              *
              * ****************************************************************************
              * ****************************************************************************
              * *** THIS PORTION OF THE MODEL WAS COPIED FROM THE                          ***
              * *** HEC-1 MODEL FROM THE DESERT AMETHYST DRAINAGE PROJECT                  ***
              * *** BY WOOD, PATEL & INC. 5/4/99 FOR THE 60% DESIGN LEVEL.                 ***
```

```
                 * *** ORIGINAL MODEL WAS DEVELOPED BY THE FCDMC, 1991                          ***
                 * ***********************************************************************
                 * ***********************************************************************
                 * ************************* EAST WESTBROOK VILLAGE GOLF COURSE ******************
                 * ***********************************************************************
                 * ***********************************************************************
                 *
                 * *** ROUTE R-WBE1 ***************************************************************
                 * ROUTE FLOW TO CPWB1 FROM WBE1 (EAST INLET TO W.B. VILLAGE)
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE13

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3378             KK  R-WBE1
3379             RS       1    FLOW      -1
3380             RC     .03     .02     .03     260  .00192
3381             RX       0      12    17.5    22.5    33.5    37.5      43      55
3382             RY      45      42      40      40      40      40      42      45
                 *
                 *
                 * *** BASIN WB1 *****************************************************************
                 * RUN OFF FROM WESTBROOK PARCELS 9,10A,11,12, AND R-3(GC)
                 * DDM   ***** Preserved *****

3383             KK     WB1
3384             BA   0.123
3385             LG     .35     .25     8.4     .06      35
3386             UC   0.333    .250
3387             UA       0       3       5       8      12      20      43      75      90      96
3388             UA     100
                 *
                 * *** COMBINE CPWB1 **************************************************************
                 * COMBINE PARCELS WB1 AND R-WBE1
                 * DDM   ***** Preserved *****

3389             KK   CPWB1
3390             HC       2    1.91
                 *
                 *
                 * *** ROUTE R-R3 *****************************************************************
                 * ROUTE FLOW TO CPWB2 FROM CPWB1 (THRU G.C.)
                 * DDM   ***** Preserved *****

3391             KK    R-R3
3392             RS       1    STOR      -1       0
3393             SV       0     .19    1.23    3.71    7.87    12.1    24.0
3394             SE      32      33      34      35      36      37    38.0
3395             SQ       0       2      12      19     195     811  1200.0
                 *
                 *
                 * ************** BASIN IDENTIFICATION ******************************************
                 * RUN OFF FROM WESTBROOK PARCELS 18B,19, AND R-4&5(GC)
                 * DDM   ***** Preserved *****

3396             KK     WB2
3397             BA   0.101
3398             LG     .35     .15     8.4     .06      45
3399             UC   0.680    .500
3400             UA       0       3       5       8      12      20      43      75      90      96
3401             UA     100
                 *
                 *
                 * *** COMBINE CPWB2 **************************************************************
                 * COMBINE PARCELS WB2 AND R-R3
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE13

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3402             KK   CPWB2
3403             HC       2
                 *
```

```
                *
                * *** ROUTE R-4-5 ************************************************************
                * ROUTE FLOW TO CPWB3 FROM CPWB2 (TRU G.C.)
                * DDM   ***** Preserved *****

3404            KK   R-4-5
3405            RS       1    STOR      -1       0
3406            SV       0    2.57    7.19   13.71    22.4      32      37      42      47      52
3407            SE      27      28      29      30      31      33      34      35      36      37
3408            SQ       0       2      12      19      21      21      21      21     386    1207
                *
                *
                * ************** BASIN IDENTIFICATION ******************************************
                * RUN OFF FROM WESTBROOK GOLF COURSE R-6
                * DDM   ***** Preserved *****

3409            KK     WB3
3410            BA   .0126
3411            LG     .35     .25     3.5     .29      45
3412            UC    .177    .150
3413            UA       0       3       5       8      12      20      43      75      90      96
3414            UA     100
                *
                *
                * *** COMBINE CPWB3 ***********************************************************
                * COMBINE PARCELS WB3 AND R-4-5
                * DDM   ***** Preserved *****

3415            KK   CPWB3
3416            HC       2
                *
                *
                * *** ROUTE R-6 ***************************************************************
                * ROUTE FLOW TO CPR6 FROM CPWB3 (INTO G.C.)
                * DDM   ***** Preserved *****

3417            KK     R-6
3418            RS       1    STOR      -1       0
3419            SV       0       2       4       6       8
3420            SE      33      34      35      36      37
3421            SQ       0       0     227     811    1200
                *
                *
                * ****************************************************************************
                * *** DIVERSION RECOVER DRN22  ************************************************
                * RECOVER diverded FLOW AT EAST INLET OF EAST WESTBROOK VILLAGE (CN22)
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                    PAGE13

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3422            KK   DRN22
3423            DR    N22I
                * ****************************************************************************
                *
                *
                * *** BASIN WB4 ***************************************************************
                * RUN OFF FROM WESTBROOK PARCELS 13,14, AND R-1(GC)
                * DDM   ***** Preserved *****

3424            KK     WB4
3425            BA   .0644
3426            LG     .35     .25     3.5     .29      45
3427            UC   0.241    .200
3428            UA       0       3       5       8      12      20      43      75      90      96
3429            UA     100
                *
                *
                * *** COMBINE CPWB4 ***********************************************************
                * COMBINE PARCELS WB4 AND DRN22
                * DDM   ***** Preserved *****

3430            KK   CPWB4
3431            HC       2    1.83
```

```
3670    KK    S10R   BASIN
3671    KM   SUB-BASIN S10R
3672    KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3673    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
3674    KM     L =  .52  Kb = .062  Adj. Slope =   19.0
3675    BA    .033
3676    LG    0.25    0.25    4.70    0.36      40
3677    UC   0.483   0.683
3678    UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3679    UA     100
        *
        *
        * *** DIVERSION DS10R0 ********************************************************
        * BASIN S10R IS DIVERTED WITH MAIN FLOW GOING TO 91ST AND GREENWAY
        * AND SPLIT FLOWS TO 99TH ON SUNCITY
        *
        * DDM   ***** Preserved *****
        *

3680    KK  DS10RO
3681    DT   S10RI
3682    DI       0       1      91     182     273     364     455     500
3683    DQ       0     0.1    59.2   118.5   177.7     237   296.2   325.8
        *
        *
        * *** ROUTE RS10RS*************************************************************
        * ROUTE RS10RS IS 3531 FT WITH A SLOPE OF 0.0034
        * CROSS SECTION IS A ROAD WITH HOMES ON BOTH SIDES
        * ALONG LOCAL STREETS
        * ROUTE FLOW TO GREENWAY CHANNEL (CN10) FROM CS10R
        * DDM   ***** Preserved *****
                                        HEC-1 INPUT                                          PAGE151

LINE    ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3684    KK  RS10RS
3685    RS       1    FLOW       0
3686    RC    0.04    0.03    0.04    3531  0.0034
3687    RX       0       1      25      26      61      62      92      93
3688    RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
        *
        *
        * *** COMBINE  CN10 ***********************************************************
        * COMBINE  RN11, BASIN N10, AND RS10RS
        * DDM   ***** Preserved *****

3689    KK    CN10
3690    HC       3
        *
        * *** DIVERSION DN10 ***********************************************************
        * *** DIVERSION MAIN (EAST GREENWAY CHANNEL), SPLIT (SOUTH) ***************
        *
        * THE GREENWAY ALIGNMENT CHANNEL CAN CARRY 1350 CFS. THE REMAINING FLOWS
        * SOUTH INTO THE DESERT HARBOR LAKES.
        *
        * DDM   ***** Preserved *****

3691    KK    DN10
3692    DT    N10I
3693    DI       0       1     100     500    1000    1350    1500    2000    2500
3694    DQ       0      .1      .2      .3      .4      .6     150     650    1150
        *
        *
        * *** ROUTE RN10E **************************************************************
        * ROUTE RN10E IS 3858 FT WITH A SLOPE OF 0.0041
        * CROSS SECTION IS THE GREENWAY ALIGMENT CHANNEL (MEASURED)
        * ALONG GREENWAY CHANNEL
        * ROUTE FLOW TO CN09* FROM CN10
        * DDM   ***** Preserved *****

3695    KK   RN10E
3696    RS       5    FLOW       0
3697    RC    0.04    0.03    0.04    3858  0.0041
3698    RX       0     100     200     220     240     260     360     460
3699    RY      10       9       8       0       0       8       9      10
        *
        *
        * *** DIVERSION RECOVER DR56 ***************************************************
        * RECOVER FLOW FRON BELL AND 87TH
        * DDM   ***** Preserved *****
```

```
3461          UA       0       3       5       8      12      20      43      75      90      96
3462          UA     100
              *
              *
              * *** COMBINE CR6W7 ************************************************************
              * COMBINE PARCELS WB7 AND RCR26
              * DDM    ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE14
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3463          KK   CR6W7
3464          HC       2
              *
              *
              * *** ROUTE R-R7 ***************************************************************
              * ROUTE FLOW TO C7R8 FROM CR6W7 (TRU W.B. GOLF COURSE)
              * DDM    ***** Preserved *****

3465          KK    R-R7
3466          RS       1    STOR      -1       0
3467          SV       0     .15     .85    2.26    4.71     6.0     7.0     9.0
3468          SE      27      28      29      30      31      32      33      34
3469          SQ       0      11      23      35      46     526    1391    2500
              *
              *
              * *** BASIN WB6 ****************************************************************
              * RUN OFF FROM WESTBROOK PARCELS 24,25,26A,27A, AND R-8(GC)
              * DDM    ***** Preserved *****

3470          KK     WB6
3471          BA   .0839
3472          LG     .35     .15     8.4     .06      45
3473          UC   0.433    .300
3474          UA       0       3       5       8      12      20      43      75      90      96
3475          UA     100
              *
              *
              * *** ROUTE R-R8 ***************************************************************
              * ROUTE FLOW TO C7R8 FROM WB6 (TRU G.C.)
              * DDM    ***** Preserved *****

3476          KK    R-R8
3477          RS       1    STOR      -1       0
3478          SV       0     .36    2.13    5.54   10.63   15.29    16.0
3479          SE      27      28      29      30      31      32      33
3480          SQ       0       2      12      19      22      30     100
              *
              *
              * *** COMBINE C7R8 *************************************************************
              * COMBINE PARCELS R-R7 AND R-R8
              * DDM    ***** Preserved *****

3481          KK    C7R8
3482          HC       2
              *
              *
              * *** ROUTE RC78 ***************************************************************
              * ROUTE FLOW TO CP-678 FROM C7R8 (ALONG MAIN STREET)
              * DDM    ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE142
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3483          KK    RC78
3484          RS       1    FLOW      -1
3485          RC     .03     .02     .03    1120   .0032
3486          RX       0      15      30      60      80     105     120     135
3487          RY     104     102     100     100     100     100     102     104
              *
              *
              * *** BASIN WB8 ****************************************************************
              * RUN OFF FROM WESTBROOK PARCELS 1B,26B, AND R/C
```

```
                * DDM   ***** Preserved *****

3488            KK     WB8
3489            BA   .0342
3490            LG     .35     .15     8.4     .06      60
3491            UC   0.167    .150
3492            UA       0       3       5       8      12      20      43      75      90      96
3493            UA     100
                *
                *
                * *** COMBINE CP-678 ************************************************************
                * COMBINE PARCELS WB8 AND RC78
                * DDM   ***** Preserved *****

3494            KK  CP-678
3495            HC       2
                *
                *
                * *** BASIN WB10 ****************************************************************
                * RUN OFF FROM WESTBROOK PARCELS 1A,2A,3A,20,21B, AND R-9A&9B(GC)
                * DDM   ***** Preserved *****

3496            KK    WB10
3497            BA   .0572
3498            LG     .35     .25     5.0     .28      45
3499            UC    .272    .200
3500            UA       0       3       5       8      12      20      43      75      90      96
3501            UA     100
                *
                *
                * *** ROUTE R-R9 ****************************************************************
                * ROUTE FLOW TO WBEOT FROM WB10 (TRU G.C.)
                * DDM   ***** Preserved *****

3502            KK    R-R9
3503            RS       1    STOR      -1       0
3504            SV       0     .03    .376   1.698   4.517   9.114  12.000
3505            SE      25      26      27      28      29      30      31
3506            SQ       0       2      11      18      24     128     200
                *
                *
                * *** COMBINE WBEOT *************************************************************
                * COMBINE FLOWS FROM R-R9 AND CP-678
                * AT INTERSECTION OF OUTLET WITH UNION HILLS RD, W.B. MAIN ENTERANCE
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE143

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3507            KK   WBEOT
3508            HC       2
                *
                *
                * *** DIVERSION DVNR ************************************************************
                * DIVERSION AT UNION HILLS RD
                * MAIN WEST ALONG UNION HILLS DIVERSION EAST TO NEWRIVER
                * DIVERT 100CFS TO NEW RIVER: 50 CFS THRU 42"CMP AND 50 CFS OVERLAND
                * third DQ was change by Entellus from 100 to 50
                * DDM   ***** Preserved *****

3509            KK    DVNR
3510            DT   TONRI
3511            DI       0      50     100     150     300     600     900
3512            DQ       0     .01     .02      50     100     100     100
                *
                *
                * *** DIVERSION CCLUB  **********************************************************
                * DIVERT THRU COUNTRY CLUB ROAD AND EVENTUALLY LOSS TO NEW RIVER
                * RATING AS PER ERIE'S REPORT, ASSUMES OVERFLOW PROPORTIONAL TO WEIR LENGTH
                * DDM   ***** Preserved *****

3513            KK   CCLUB
3514            DT   DCLUB
3515            DI       0      50      80     982    2670    7461   13454
```

```
3516        DQ       0       0       0     214     607    1716    3152
            *
            *
            * *** ROUTE RR287  ***********************************************************
            * ROUTE REMAINING TO INTERSECTION OF UNION HILLS & 87TH AVE
            * DDM   ***** Preserved *****

3517        KK   RR287
3518        RS       1    FLOW      -1
3519        RC     .02   0.015     .02     660   .0015
3520        RX       0       1       5      35      40      70      74      75
3521        RY     104     102     100     101     101     100     102     104
            *
            *
            * *** DIVERSION DV87S  ***********************************************************
            * DIVERT SOUTH THRU 87TH AVE, PART  GO TO 91ST AVENUE AT UNION HILLS
            * USING RATING CURVE DEVELOPED BY ERIE & ASSOCIATES
            * INFLOW IS ASSUMED SUM OF RATED Q AT RD INTERSECTION
            * THIS APPLIES TO SUCCEDING DIVERSIONS USING ERIE'S DATA
            * DDM   ***** Preserved *****

3522        KK   DV87S
3523        DT  DV87SI
3524        DI       0      50      80     762    2067    5745
3525        DQ       0     .01     .02     221     625    1768
            *
            *
            * *** ROUTE RR289  ***********************************************************
            * ROUTE REMAINING FLOW TO 89TH AVE THRU NORTH SIDE OF UNION HILLS RD.
            * DDM   ***** Preserved *****
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3526        KK   RR289
3527        RS       1    FLOW      -1
3528        RC   0.015   0.015   0.015    1320   .0037
3529        RX       0       1       5      35      40      70      74      75
3530        RY     104     102     100     101     101     100     102     104
            *
            *
            * *** DIVERSION DV89 ************************************************************
            * ASSUME SPLIT OCCURS WHEN DEPTH IS 0.5 FT ABOVE 91ST AVE CROWN AT INTERSECTION
            * PER ERIE'S RATING Q=145 CFS ABOVE WHICH FLOW WILL HAVE 50-50 SPLIT
            * FLOW LESS OR EQ TO 145 CFS WILL SIMPLY CONTINUE WESTWARD TO 91ST AVENUE
            * ******** LTM:  Diversion was prev. modeled incorrectly to split flow 50/50
            *                starting at Q=0.  Corrected so 50/50 begins AFTER Q=145 ******
            * DDM   ***** Preserved *****

3531        KK    DS89
3532        DT   DV89I
3533        DI       0      80     145     155     305     505     805    1205
3534        DQ       0     .01     .02       5      80     180     330     530
            *
            *
            * *** ROUTE TODET  ***********************************************************
            * Hydrograph remaining after 125 cfs flows to 91st Ave.
            * Route short distance to eliminate diversion error messages
            * DDM   ***** Preserved *****

3535        KK   TODET
3536        KO       3
3537        RS       1    FLOW      -1
3538        RC     .02   0.015     .02    1000   .0015
3539        RX       0     101     105     135     140     170     174     275
3540        RY     104     102     100     101     101     100     102     104
            *
            *
            * *** DIVERSION DV91 ************************************************************
            * Allow max 125 cfs to continue to 91st Ave.
            * ENTELLUS CHANGED THE SWITCHED MAIN/SPLIT HYDROGRAPHS AND ALSO MODIFIED
            * THE THIRD DQ RECORD
            * DDM   ***** Preserved *****
```

```
3541          KK   DV91
3542          DT   DV91I
3543          DI       0     100     345     350     500     800    1200
3544          DQ       0     .01     220     230     475     675    1075
              *
              *
              * ***************************************************************************
              * **************** EAST WESTBROOK VILLAGE GOLF COURSE TO 91ST AVE **************
              * ***************************************************************************
              * ***************************************************************************
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE14
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3545          KK     WB9
3546          KM   COMBINE PARCELS 8A,10B,7,6,5,G10,2B,3B
3547          BA   .2814
3548          LG     .25     .25     3.5     .28      45
3549          UC    .290    .250
3550          UA       0       5      16      30      65      77      84      90      94      97
3551          UA     100
              *
              *
              * DDM   ***** Preserved *****

3552          KK   R-R10
3553          KM   ROUTE FLOWS THROUGH RESERVOIR 10, WESTBROOK VILLAGE EAST
3554          KM   THE RESERVOIR BLEEDS INTO 91ST AVENUE,
3555          RS       1    STOR      -1       0
3556          SV       0     .35    2.28     6.4   12.82    24.0    24.0
3557          SE    27.5    28.5    29.5    30.5    31.5    32.5    33.5
3558          SQ       0       2      12      19      22    44.0     100
              *
              *
              * ***************************************************************************
              * ********************** ENTELLUS INSERT   ************************************
              * *** DIVERSION RECOVER DRXI1  ******************************************
              * RECOVER DIVERTED FLOW FROM CX1 BEARDSLEY @ 91 AVE
              * DDM   ***** Preserved *****

3559          KK   DRIX1
3560          DR     X1I
              *
              *
              * *** ROUTE RX1S  ***************************************************************
              * ROUTE RX1S IS 5367 FT WITH A SLOPE OF 0.0048
              * CROSS SECTION IS A LARGE ROAD WITH DITCHES AND HOMES TO BOTH SIDES
              * ALONG 91ST AVE.
              * ROUTE FLOW TO UNION HILLS (CN11B) FROM BEARDSLEY (CX1)
              * DDM   ***** Preserved *****

3561          KK    RX1S
3562          KO       3
3563          RS       7    FLOW       0
3564          RC     .04     .03     .04    5367  0.0048
3565          RX       0       1      21      42     102     123     144     145
3566          RY      10       5       0       2       2       0       5      10
              *
              *
              * *** COMBINE 2CP91 (CN11B) ****************************************************
              * COMBINE WEST-WESTBROOK VILAGE RX1S AND DV91 R-R10
              * INTERSECTION OF UNION HILLS AND 91ST AVE.
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE146
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3567          KK   CN11B
3568          HC       4    6.49
              * ***************************************************************************
              * ************************ END ENTELLUS INSERT ********************************
              *
```

```
                 * Route Flow from Intersection of 91st Ave. and Union Hills Drive
                 * To Detention Basin
                 * DDM   ***** Preserved *****

3569             KK   RCP91
3570             KO       3
3571             RK    1300   .0039    .013            CIRC      74
                 *
                 *
                 * LTM:  Undeveloped St. Joe's property, including Detention Basin
                 * DDM   ***** Preserved *****

3572             KK  SB-G4a
3573             BA    .063
3574             LG     .20      .25    5.50     .19    5.00
3575             UC    .240     .227
3576             UA       0        5      16      30      65      77      84      90      94      97
3577             UA     100
                 *
                 *
                 * *** DIVERSION RECOVERY DR91 ***************************************************
                 * RECOVERS FLOW DIVERTED INTO BASIN AT 89TH AVE
                 * DDM   ***** Preserved *****

3578             KK    DR91
3579             DR   DV91I
                 *
                 *
                 * *** ROUTE R2DET  ***********************************************************
                 * Route Remaining From Intersection of 89th Ave. and Union Hills Drive
                 * To Detention Basin
                 * DDM   ***** Preserved *****

3580             KK   R2DET
3581             KO       3                                21
3582             RK    1925   .0038    .013            CIRC      74
                 *
                 *
                 * *** COMBINE CDDET **************************************************************
                 * Combine Flows from 89th Ave. and Union Hills Drive With Flows
                 * from 91st Avenue and Union Hills Drive In Detention Basin
                 * DDM   ***** Preserved *****

3583             KK   CPDET
3584             KO                                        21
3585             HC       3   10.63
                 *
                 *
                 * *** STORAGE S-DET **************************************************************
                 * PROPOSED DESERT AMETHYST DETENTION BASIN
                 * ****** LTM:  Use design-level storage volume/elevation data provided by Wood
                 *        Patel. Basin size reduced to accommodate potential landscaping req'mts
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE14

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3586             KK   S-DET
3587             KO       3                                21
3588             RS       1    STOR       0
3589             SV       0   0.035    .378   1.531   3.866   7.064  10.531  14.032  17.606  21.253
3590             SV  24.973  28.766  32.634  36.576  40.594  44.688  44.689    44.8    44.9      45
3591             SE  1203.0  1203.5    1204  1204.5    1205  1205.5    1206  1206.5    1207  1207.5
3592             SE    1208  1208.5    1209  1209.5    1210  1210.5  1210.6    1211  1211.3  1211.5
3593             SQ      60      68      80      96     117     148     188     237     288     329
3594             SQ     333     337     341     345     348     357     500    1000    1500    2500
                 *
                 *
                 * DDM   ***** Preserved *****

3595             KK    RDET
3596             KM         Discharge from Detention Basin to Brookside Village Basin
3597             RS       1    FLOW      -1
3598             RC     .03     .02     .03    1550   .0033
```

```
3599          RX       0     303     306     311     316     321     421     527
3600          RY     107     106     105     100     100     105     106     107
              *
              *
              * ******************************************************************************
              * *** END OF COPIED CODE FROM WOOD, PATEL & INC.'S DESERT AMETHYST MODEL     ***
              * ******************************************************************************
              * ******************************************************************************
              *
              * *** ROUTE RN11BS ******************************************************
              * ROUTE RN11BS IS 4083 FT WITH A SLOPE OF 0.0042
              * CROSS SECTION IS CHANNEL ON THE WEST SIDE (AFTER DETENTION BASIN - MEASURED)
              * ROUTE FLOW TO CN11 FROM CN11B
              * DDM   ***** Preserved *****

3601          KK  RN11BS
3602          RS      10    FLOW       0
3603          RC    0.04    0.04    0.04    4083   .0042
3604          RX       0     100     300     360     380     420     620     720
3605          RY      10       8       6       2       0       6       8      10
              *
              *
              * DDM   ***** Preserved *****

3606          KK     N11   BASIN
3607          KM   SUB-BASIN N11
3608          KM   6-HOUR RAINFALL, PATTERN NO. 1.34 WAS USED TO FIND TC & R FOR THIS BASIN
3609          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .988
3610          KM     L = 1.52  Kb = .032  Adj. Slope =   17.0
3611          BA    .901
3612          LG    0.18    0.21    7.00    0.13      35
3613          UC   0.767   0.409
3614          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3615          UA     100
              *
              *
              * *** DIVERSION RECOVER DRV87 ***************************************************
              * RECOVER FLOW FRON 87TH AVE AND UNION HILLS (DV87S)
              * DDM   ***** Preserved *****
                                          HEC-1 INPUT                                    PAGE14
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3616          KK   DRV87
3617          DR  DV87SI
              *
              *
              * *** ROUTE RDV87S  ***********************************************************
              * ROUTE RDV87S IS 1160 FT WITH A SLOPE OF 0.0051
              * CROSS SECTION FROM WOOD, PATEL & INC. MODEL
              * ALONG 87TH AVE
              * ROUTE FLOW SOUTH OF UNION HILLS
              * DDM   ***** Preserved *****

3618          KK  RDV87S
3619          RS       1    FLOW       0
3620          RC     .02    .015     .02    1160   .0051
3621          RX       0       1       5      35      40      70      74      75
3622          RY     104     102     100     101     101     100     102     104
              *
              *
              * *** ROUTE R-G1  *************************************************************
              * ROUTE R-G1 IS 1160 FT WITH A SLOPE OF 0.0039
              * CROSS SECTION FROM WOOD, PATEL & INC. MODEL
              * ALONG 87TH AVE
              * ROUTE FLOW SOUTH OF UNION HILLS
              * DDM   ***** Preserved *****

3623          KK    R-G1
3624          RS       1    FLOW       0
3625          RC     .02    .015     .02    1160   .0039
3626          RX       0       1       5      35      40      70      74      75
3627          RY     104     102     100     101     101     100     102     104
              *
```

```
                 *
                 * *** DIVERSION DX55 ******************************************************
                 * DIVERT FLOW SPLIT EAST TO NEW RIVER
                 * DIVERT 50% TO A MAXIMUM OF 150CFS EAST ALONG BELL RD.
                 * DDM   ***** Preserved *****

3628             KK    DX55
3629             DT   DX55I
3630             DI       0      20      50     150     200     300    3000
3631             DQ       0      20      50     150     150     150     150
                 *
                 *
                 * *** DIVERSION DX56 ******************************************************
                 * DIVERT FLOW MAIN WEST TO 91ST AVE, SPLIT SOUTH TO GREENWAY
                 * DIVERT SOUTH USING ERIE'S RATING VALUES
                 * DDM   ***** Preserved *****

3632             KK    DX56
3633             DT   DX56I
3634             DI       0     101     600    2410    4905
3635             DQ       0      80     310    1540    3053
                 *
                 *
                 * *** ROUTE DX56W  ********************************************************
                 * ROUTE DX56 IS 2600 FT WITH A SLOPE OF 0.0015
                 * CROSS SECTION FROM WOOD, PATEL & INC. MODEL
                 * ALONG BELL RD
                 * ROUTE FLOW TO 91 AVE (CN11) FROM 87TH AVE
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                    PAGE14

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3636             KK   DX56W
3637             RS       1    FLOW       0
3638             RC     .02    .015     .02    2600   .0015
3639             RX       0       1       5      45      50      90      94      95
3640             RY     104     102     100     101     101     100     102     104
                 *
                 *
                 * *** DIVERSION RECOVER DRV89 *********************************************
                 * RECOVER FLOW FRON 89TH AVE AND UNION HILLS (DV89)
                 * DDM   ***** Preserved *****

3641             KK   DRV89
3642             DR   DV89I
                 *
                 *
                 * *** ROUTE RDV89S  ********************************************************
                 * ROUTE DV89 IS 5280 FT WITH A SLOPE OF 0.0049
                 * CROSS SECTION FROM WOOD, PATEL & INC. MODEL
                 * ALONG 89TH AVE
                 * ROUTE FLOW TO BELL AVE  FROM UNION HILLS

3643             KK  RDV89S
3644             RS       1    FLOW       0
3645             RC     .02    .015     .02    5280   .0049
3646             RX       0       1       5      35      40      70      74      75
3647             RY     104     102     100     101     101     100     102     104
                 *
                 *
                 * *** ROUTE RDV89E  ********************************************************
                 * ROUTE RDV89E IS 5280 FT WITH A SLOPE OF 0.0049
                 * CROSS SECTION FROM WOOD, PATEL & INC. MODEL
                 * ALONG BELL
                 * ROUTE FLOW TO 91ST CHANNEL FROM 89TH AVE
                 * DDM   ***** Preserved *****

3648             KK  RDV89E
3649             RS       1    FLOW       0
3650             RC     .02    .015     .02    5280   .0049
3651             RX       0       1       5      35      40      70      74      75
3652             RY     104     102     100     101     101     100     102     104
                 *
```

```
                 *
                 * *** COMBINE  CN11 ********************************************************
                 * Combine  CN11B AND BASIN N11, DX55, DV89
                 * DDM   ***** Preserved *****

3653             KK    CN11
3654             HC       4   11.53
                 *
                 *
                 * *** ROUTE RN11  ******************************************************
                 * ROUTE RN11 IS 4972 FT WITH A SLOPE OF 0.0036
                 * CROSS SECTION IS THE 91ST AVENUE CHANNEL (MEASURED)
                 * ALONG 91ST CHANNEL
                 * *** ROUTE FLOW TO CN10 FROM CN11 *************************************
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                    PAGE15

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3655             KK    RN11
3656             RS       6    FLOW       0
3657             RC    0.04    0.03    0.04    4972  0.0036
3658             RX       0     100     200     220     240     260     360     460
3659             RY      10       9       8       0       0       8       9      10
                 *
                 *
                 * DDM   ***** Preserved *****

3660             KK     N10   BASIN
3661             KM   SUB-BASIN N10
3662             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3663             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .994
3664             KM     L = 1.36  Kb = .038  Adj. Slope =   18.0
3665             BA    .492
3666             LG    0.21    0.27    5.60    0.25      36
3667             UC   0.746   0.512
3668             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3669             UA     100
                 *
                 *
                 * DDM   ***** Preserved *****

3670             KK    S10R   BASIN
3671             KM   SUB-BASIN S10R
3672             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3673             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
3674             KM     L =  .52  Kb = .062  Adj. Slope =   19.0
3675             BA    .033
3676             LG    0.25    0.25    4.70    0.36      40
3677             UC   0.483   0.683
3678             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3679             UA     100
                 *
                 *
                 * *** DIVERSION DS10RO ************************************************
                 * BASIN S10R IS DIVERTED WITH MAIN FLOW GOING TO 91ST AND GREENWAY
                 * AND SPLIT FLOWS TO 99TH ON SUNCITY
                 *
                 * DDM   ***** Preserved *****
                 *

3680             KK  DS10RO
3681             DT   S10RI
3682             DI       0       1      91     182     273     364     455     500
3683             DQ       0     0.1    59.2   118.5   177.7     237   296.2   325.8
                 *
                 *
                 * *** ROUTE RS10RS*****************************************************
                 * ROUTE RS10RS IS 3531 FT WITH A SLOPE OF 0.0034
                 * CROSS SECTION IS A ROAD WITH HOMES ON BOTH SIDES
                 * ALONG LOCAL STREETS
                 * ROUTE FLOW TO GREENWAY CHANNEL (CN10) FROM CS10R
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                    PAGE151
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3684          KK  RS10RS
3685          RS       1    FLOW       0
3686          RC    0.04    0.03    0.04    3531  0.0034
3687          RX       0       1      25      26      61      62      92      93
3688          RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
              *
              *
              * *** COMBINE  CN10 ***************************************************
              * COMBINE  RN11, BASIN N10, AND RS10RS
              * DDM   ***** Preserved *****

3689          KK    CN10
3690          HC       3
              *
              * *** DIVERSION DN10 ***************************************************
              * *** DIVERSION MAIN (EAST GREENWAY CHANNEL), SPLIT (SOUTH) ***************
              *
              * THE GREENWAY ALIGNMENT CHANNEL CAN CARRY 750 CFS. THE REMAINING FLOWS
              * SOUTH INTO THE DESERT HARBOR LAKES.
              *
              * DDM   ***** Preserved *****

3691          KK    DN10
3692          DT    N10I
3693          DI       0       1      10      30     100     400     750    1000    2000
3694          DQ       0      .1      .2      .3      .4      .6      .7     250    1250
              *
              *
              * *** ROUTE RN10E ******************************************************
              * ROUTE RN10E IS 3858 FT WITH A SLOPE OF 0.0041
              * CROSS SECTION IS THE GREENWAY ALIGMENT CHANNEL (MEASURED)
              * ALONG GREENWAY CHANNEL
              * ROUTE FLOW TO CN09* FROM CN10
              * DDM   ***** Preserved *****

3695          KK   RN10E
3696          RS       5    FLOW       0
3697          RC    0.04    0.03    0.04    3858  0.0041
3698          RX       0     100     200     220     240     260     360     460
3699          RY      10       9       8       0       0       8       9      10
              *
              *
              * *** DIVERSION RECOVER DR56 ***************************************************
              * RECOVER FLOW FRON BELL AND 87TH
              * DDM   ***** Preserved *****

3700          KK    DR56
3701          DR   DX56I
              *
              *
              * *** ROUTE RDR56 ******************************************************
              * ROUTE RDR56 IS 6000 FT WITH A SLOPE OF 0.0041
              * CROSS SECTION FROM WOOD, PATEL & INC. MODEL
              * 87TH AVE
              * ROUTE FLOW TO CN09* FROM BELL RD
              * DDM   ***** Preserved *****
1                                    HEC-1 INPUT                                    PAGE152

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3702          KK   RDR56
3703          RS       1    FLOW       0
3704          RC    0.04    0.03    0.04    6000  0.0041
3705          RX       0       1      25      26      61      62      92      93
3706          RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
              *
              *
              * DDM   ***** Preserved *****

3707          KK     N09   BASIN
3708          KM   SUB-BASIN N09
```

```
3709          KM   6-HOUR RAINFALL, PATTERN NO. 1.15 WAS USED TO FIND TC & R FOR THIS BASIN
3710          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .992
3711          KM     L = 1.35  Kb = .035  Adj. Slope =   27.0
3712          BA    .650
3713          LG    0.17    0.21    4.65    0.36      56
3714          UC   0.592   0.336
3715          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3716          UA     100
              *
              *
              * *** COMBINE CN09*  ****************************************************
              * COMBINE  CN10, RDX56, N09

3717          KK   CN09*
3718          HC       3
              *
              *
              * *** RETRIVE HYDROGRAF CN21 ****************************************************
              * RETRIVE HYDROGRAPH STORED ON TAPE 21
              * DDM   ***** Preserved *****

3719          KK    CN21
3720          BI    CN21      21
              *
              *
              * *** ROUTE RN21  ***********************************************************
              * ROUTE RN21 IS 5633 FT WITH A SLOPE OF 0.0039
              * CROSS SECTION IS NEW RIVER (MEASURED)
              * ALONG NEW RIVER
              * ROUTE FLOW TO Union Hills (CN20) FROM Berardsley RD. (CN21)
              * DDM   ***** Preserved *****

3721          KK    RN21
3722          RS      10    FLOW       0
3723          RC    0.05    0.04    0.05    5633  0.0039
3724          RX       0     100     652     722     800     900    1006    1400
3725          RY      16       4       8       0       0       0      10      16
              *
              *
              * *** DIVERSION RECOVER TOBR  ***************************************************
              * RECOVER DIVERTED FLOW FROM DVNR
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3726          KK  DRTONR
3727          DR   TONRI
              *
              * DDM   ***** Preserved *****

3728          KK     N20   BASIN
3729          KM   SUB-BASIN N20
3730          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3731          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
3732          KM     L =  .41  Kb = .041  Adj. Slope =   56.0
3733          BA    .357
3734          LG    0.17    0.17    4.70    0.33      33
3735          UC   0.683   0.487
3736          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3737          UA     100
              *
              *
              * *** COMBINE  CN20 ************************************************************
              * *** COMBINE BASIN N20, TOBR, RN21
              * DDM   ***** Preserved *****

3738          KK    CN20
3739          HC       3
              *
              *
              * *** ROUTE RN20  ***********************************************************
              * ROUTE RN20 IS 5820 FT WITH A SLOPE OF 0.0048
              * CROSS SECTION IS NEW RIVER (MEASURED)
```

```
                 * aLONG NEW RIVER
                 * ROUTE FLOW TO CN12 FROM CN20
                 * DDM   ***** Preserved *****

3740             KK    RN20
3741             RS      10    FLOW       0
3742             RC    0.05   0.035     .05    5820  0.0048
3743             RX       0     102     233     263     461     501     530    1220
3744             RY      19       8      12       4       2       2       8      13
                 *
                 *
                 * DDM   ***** Preserved *****

3745             KK     N12   BASIN
3746             KM   SUB-BASIN N12
3747             KM   6-HOUR RAINFALL, PATTERN NO. 1.01 WAS USED TO FIND TC & R FOR THIS BASIN
3748             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .993
3749             KM     L =  .47  Kb = .035  Adj. Slope =   21.0
3750             BA    .508
3751             LG    0.16    0.25    5.40    0.24      41
3752             UC   1.075   0.768
3753             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3754             UA     100
                 *
                 *
                 * *** STORAGE ROUTING LN12  ***********************************************
                 * *** COMMERCIAL DEVELOPMENT STORAGE (ACCOUNTED) ************************
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE15

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3755             KK    LN12
3756             DT   LN12D     2.2
3757             DI       0     100    1000   10000
3758             DQ       0     100    1000   10000
                 *
                 *
                 * DDM   ***** Preserved *****

3759             KK     N13   BASIN
3760             KM   SUB-BASIN N13
3761             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3762             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .994
3763             KM     L = 5.15  Kb = .045  Adj. Slope =   17.0
3764             BA    .497
3765             LG    0.12    0.23    4.70    0.43      71
3766             UC   1.500   3.208
3767             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3768             UA     100
                 *
                 *
                 * ******************* INSERT CONTRY CLUB AND BELL ROAD DIVERSIONS HERE *********
                 *
                 * *** COMBINE  CN12 ******************************************************
                 * *** COMBINE  CN20, N12, AND N13
                 * DDM   ***** Preserved *****

3769             KK    CN12
3770             HC       3
                 *
                 *
                 * *** ROUTE RN12  ********************************************************
                 * ROUTE RN12 IS 5138 FT WITH A SLOPE OF 0.0051
                 * CROSS SECTION IS NEW RIVER (MEASURED)
                 * ALONG NEW RIVER
                 * ROUTE FLOW TO CN09* FROM CN12
                 * DDM   ***** Preserved *****

3771             KK    RN12
3772             RS       9    FLOW       0
3773             RC    0.05   0.035    0.05    5138  0.0051
3774             RX       0      89     204     334     418     535     586    1613
3775             RY      31      28       2       0       0       4      16      17
```

```
                 *
                 *
                 * *** COMBINE CN09+  ************************************************************
                 * COMBINE  (RCN10, RDX56, N09), RN10E
                 * DDM   ***** Preserved *****

3776             KK   CN09+
3777             HC       2   26.16
                 *
                 *
                 * *** ROUTE RN09*  ******************************************************
                 * ROUTE RN09* IS 2117 FT WITH A SLOPE OF 0.0053
                 * CROSS SECTION IS THE NEW RIVER (MEASURED)
                 * ALONG NEW RIVER
                 * ROUTE FLOW TO CN09  FROM CN09*
                 * DDM   ***** Preserved *****
1                                    HEC-1 INPUT                                          PAGE15

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3778             KK   RN09*
3779             RS       5    FLOW       0
3780             RC    0.05     .06     .05    2117  0.0053
3781             RX     152     209     434     597     749     832     908    1153
3782             RY      22      16      10       4       0       0      20      25
                 *
                 * ****************************************************************************
                 * *********************   EAST SIDE OF NEW RIVER   ****************************
                 * ****************************************************************************
                 *
                 * DDM   ***** Preserved *****

3783             KK    N19E   BASIN
3784             KM   SUB-BASIN N19E
3785             KM   6-HOUR RAINFALL, PATTERN NO. 1.20 WAS USED TO FIND TC & R FOR THIS BASIN
3786             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .991
3787             KM     L = 1.24  Kb = .044  Adj. Slope =   15.0
3788             BA    .703
3789             LG    0.35    0.35    4.45    0.37      19
3790             UC   0.908   0.483
3791             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3792             UA     100
                 *
                 *
                 * DDM   ***** Preserved *****

3793             KK    N19F   BASIN
3794             KM   SUB-BASIN N19F
3795             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3796             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
3797             KM     L = 1.24  Kb = .047  Adj. Slope =   18.0
3798             BA    .374
3799             LG    0.35    0.35    4.70    0.31       1
3800             UC   0.879   0.667
3801             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3802             UA     100
                 *
                 *
                 * *** COMBINE CN19E ******************************************************
                 * COMBINE BASINS N19E AND N19F
                 * DDM   ***** Preserved *****

3803             KK   CN19E
3804             HC       2
                 *
                 *
                 * *** ROUTE RN19E ********************************************************
                 * ROUTE RN19E IS 3344 FT WITH A SLOPE OF 0.0072
                 * CROSS SECTION A SMALL NATURAL WASH
                 *
                 * *** ROUTE FLOW TO CN19D FROM CN19E *************************************
                 * DDM   ***** Preserved *****
                                     HEC-1 INPUT                                          PAGE15
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3805          KK   RN19E
3806          RS       1    FLOW       0
3807          RC     .04     .04     .04    3344   .0072
3808          RX       0     350     450     480     482     510     610     910
3809          RY       7       6       5       1       0       5       6       7
              *
              *
              * DDM   ***** Preserved *****

3810          KK    N19D   BASIN
3811          KM   SUB-BASIN N19D
3812          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3813          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
3814          KM     L = 1.41  Kb = .047  Adj. Slope =   69.0
3815          BA    .393
3816          LG    0.35    0.35    4.20    0.43      27
3817          UC   0.492   0.377
3818          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
3819          UA     100
              *
              *
              * *** COMBINE  CN19D ***************************************************
              * COMBINE BASIN N19D AND CN19E
              * DDM   ***** Preserved *****

3820          KK   CN19D
3821          HC       2
              *
              * *** ROUTE RN19D *******************************************************
              *
              * ROUTE RN19D IS 4986 FT WITH A SLOPE OF 0.0076
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              *
              * *** ROUTE FLOW TO CN19C FROM CN19D *************************************
              * DDM   ***** Preserved *****

3822          KK   RN19D
3823          RS      12    FLOW       0
3824          RC    0.05    0.06    0.05    4986  0.0076
3825          RX       0     100     300     360     380     420     620     720
3826          RY      10       8       6       2       0       6       8      10
              *
              * DDM   ***** Preserved *****

3827          KK    N19C   BASIN
3828          KM   SUB-BASIN N19C
3829          KM   6-HOUR RAINFALL, PATTERN NO. 1.24 WAS USED TO FIND TC & R FOR THIS BASIN
3830          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
3831          KM     L = 1.14  Kb = .043  Adj. Slope =  102.0
3832          BA    .756
3833          LG    0.31    0.31    4.55    0.37      23
3834          UC   0.375   0.162
3835          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3836          UA     100
              *
              *
              * *** COMBINE  CN19C ****************************************************
              * *** COMBINE BASIN N19C AND CN19D ***************************************
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                    PAGE157

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3837          KK   CN19C
3838          HC       2
              *
              * *** ROUTE RN19C *******************************************************
              *
              * ROUTE RN19C IS 4137 FT WITH A SLOPE OF 0.0097
              * CROSS SECTION IS A MEDIUM NATURAL WASH (MEASURED)
              *
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                * *** ROUTE FLOW TO CN19B FROM CN19C ************************************
                * DDM   ***** Preserved *****

3839            KK   RN19C
3840            RS      50    FLOW       0
3841            RC     .05     .05     .05    4137  0.0097
3842            RX       0     123     319     353     441     477     726     900
3843            RY      12       6       4       0       0       4       7       9
                *
                * DDM   ***** Preserved *****

3844            KK    N19B   BASIN
3845            KM   SUB-BASIN N19B
3846            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
3847            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
3848            KM     L =  .86  Kb = .048  Adj. Slope =  159.0
3849            BA    .318
3850            LG    0.33    0.30    4.60    0.34      20
3851            UC   0.254   0.138
3852            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
3853            UA     100
                *
                * *** COMBINE  CN19B ****************************************************
                * *** COMBINE BASIN N19B AND CN19C ****************************************
                * DDM   ***** Preserved *****

3854            KK   CN19B
3855            HC       2
                *
                * *** ROUTE RN19B ********************************************************
                *
                * ROUTE RN19B IS 6101 FT WITH A SLOPE OF 0.0066
                * CROSS SECTION IS A MEDIUM NATURAL WASH
                *
                * *** ROUTE FLOW TO CN19A FROM CN19B  ************************************
                * DDM   ***** Preserved *****

3856            KK   RN19B
3857            RS      12    FLOW       0
3858            RC    0.05    0.06    0.05    6101  0.0066
3859            RX       0     100     300     360     380     420     620     720
3860            RY      10       8       6       2       0       6       8      10
                *
                *
                * DDM   ***** Preserved *****
```



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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3861            KK    N19A   BASIN
3862            KM   SUB-BASIN N19A
3863            KM   24-HOUR RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
3864            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .976
3865            KM     L = 1.16  Kb = .026  Adj. Slope =  102.0
3866            KM    CLARK UNIT HYDROGRAPH FOR NATURAL WATERSHEDS WAS USED FOR THIS BASIN
3867            BA    .467
3868            LG    0.15    0.34    4.90    0.28      32
3869            UC   0.237   0.317
3870            UA       0       3       5       8      12      20      43      75      90      96
3871            UA     100
                *
                *
                * DDM   ***** Preserved *****

3872            KK    A21B   BASIN
3873            KM   SUB-BASIN A21B
3874            KM   24-HOUR RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
3875            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .991
3876            KM     L = .40  Kb = .033  Adj. Slope =  315.0
3877            KM    CLARK UNIT HYDROGRAPH FOR NATURAL WATERSHEDS WAS USED FOR THIS BASIN
3878            BA    .022
3879            LG    0.15    0.35    4.50    0.35      34
3880            UC   0.237   0.317
3881            UA       0       3       5       8      12      20      43      75      90      96
```

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3882        UA     100
            *
            *
            * *** ROUTE RA21B ***********************************************************
            * ROUTE RA21B IS 1000 FT WITH APPROX. SLOPE OF 0.0200 (MEASURED FROM 1996 TOPO)
            * CROSS SECTION IS A MEDIUM NATURAL WASH
            *
            * *** ROUTE FLOW TO CN19A FROM BASIN A21B ***************************************
            * DDM   ***** Preserved *****

3883        KK   RA21B
3884        KO       3
3885        RS       4    FLOW       0
3886        RC    .050    .060    .050    1000   .0200
3887        RX       0     100     300     360     380     420     620     720
3888        RY      10       8       6       2       0       6       8      10
            *
            *
            * *** COMBINE  CN19A ************************************************************
            * COMBINE BASIN N19A, RN19B, AND RA21B
            * DDM   ***** Preserved *****

3889        KK   CN19A
3890        HC       3    3.04
            *
            * ******************************************************************************
            * STORAGE IS ENTERED HERE FOR THE DETENTION BASIN NORTH OF
            * ARROWHEAD RANCH LAKES (LAKE #1).  THE WIER CREST ELEVATION IS 1296.00 WHICH IS
            * ALSO THE 100-YEAR STARTING WATER SURFACE ELEVATION.
            * ******************************************************************************
            *
            * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                    PAGE15

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3891        KK   397RR
3892        KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #1) IN THUNDERBIRD PARK.
3893        KM   SOURCE:  NEW ANALYSIS FOR ARROWHEAD RANCH.
3894        RS       1    ELEV    1296
3895        SV       0    8.50   17.19   26.06   35.12   44.34   53.71   63.24   72.91
3896        SE    1296  1296.5    1297  1297.5    1298  1298.5    1299  1299.5    1300
3897        SQ       0     139     399     732    1146    1639    2202    2814    3516
            *
            *
            * DDM   ***** Preserved *****

3898        KK   398A    BASIN
3899        KM   RUNOFF GENERATED ON SUB-BASIN 398A
3900        KM   THIS BASIN IS ALSO BASIN N19 IN ENTELLUS REPORT.
3901        KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3902        KM    L= 0.34 mi. S= 315 ft/mi  Kb= .029 Tc = 0.100 Hr. R = 0.045
3903        KM   24-HOUR RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
3904        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .991
3905        KM    CLARK UNIT HYDROGRAPH FOR NATURAL WATERSHEDS WAS USED FOR THIS BASIN
3906        BA    .102
3907        LG    0.15    0.35    4.00    0.45      61
3908        UC    .196    .094
3909        UA       0       3       5       8      12      20      43      75      90      96
3910        UA     100
            *
            *
            * DDM   ***** Preserved *****

3911        KK   398B    BASIN
3912        KM   RUNOFF GENERATED ON SUB-BASIN 398B
3913        KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3914        KM    L= .93 mi. S= 30 ft/mi  Kb= .045 Tc = .496 Hr. R = .500
3915        KM   24-HOUR RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
3916        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .991
3917        KM    CLARK UNIT HYDROGRAPH FOR URBAN WATERSHEDS WAS USED FOR THIS BASIN
3918        BA    .136
3919        LG    0.17    0.17    4.65    0.39      63
3920        UC    .512    .518
```

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3921          UA       0       5      16      30      65      77      84      90      94      97
3922          UA     100
              *
              *
              * *** COMBINE  C398B ***************************************************
              * COMBINE BASIN 398A, 398B, AND CN19A
              * DDM   ***** Preserved *****

3923          KK   C398B
3924          HC       3
              *
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE16

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3925          KK  398BRR
3926          KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #2) IN SUB-BASIN 398B.
3927          KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
3928          KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
3929          KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
3930          KM   SOURCE:  NEW ANALYSIS FOR ARROWHEAD RANCH.
3931          RS       1    ELEV    1294
3932          SV       0   14.13   28.79   43.96   59.40   74.84   90.27  105.71  121.14
3933          SE    1294  1294.5    1295  1295.5    1296  1296.5    1297  1297.5    1298
3934          SQ       0     224     653    1296    2017    3045    4090    5217    6375
              *
              *
              * *** DIVERSION D398B ***********************************************************
              * DIVERSION OF LAKE #2: MAIN EAST TO LAKE #3 & LAKE #4 (398BE),
              * SPLIT WEST TO LAKE #5 (398BW).
              * DDM   ***** Preserved *****

3935          KK   D398B
3936          DT   398BI
3937          DI       1     240     360     480     600     720     840     960    1080    1200
3938          DQ      .1      80     120     160     200     240     280     320     360     400
              *
              *
              * *** DIVERSION D398BE ***********************************************************
              * DIVERSION OF LAKE #2: MAIN SOUTH EAST TO LAKE #3 (398BSE),
              * SPLIT WEST TO LAKE #4 (398BSW).
              * DDM   ***** Preserved *****

3939          KK  D398BE
3940          DT  398BSI
3941          DI       1     240     360     480     600     720     840     960    1080    1200
3942          DQ      .1     120     180     240     300     360     420     480     540     600
              *
              *
              * DDM   ***** Preserved *****

3943          KK    398D   BASIN
3944          KM   RUNOFF GENERATED ON SUB-BASIN 398D
3945          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3946          KM    L= .24 mi. S= 315 ft/mi  Kb= .029 Tc = .083 Hr. R = .031
3947          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
3948          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .991
3949          KM    CLARK UNIT HYDROGRAPH FOR NATURAL WATERSHEDS WAS USED FOR THIS BASIN
3950          BA    .081
3951          LG    0.15    0.35    3.95    0.47      65
3952          UC    .146    .058
3953          UA       0       3       5       8      12      20      43      75      90      96
3954          UA     100
              *
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE161

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3955          KK    398E   BASIN
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3956          KM   RUNOFF GENERATED ON SUB-BASIN 398E
3957          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3958          KM    L= .38 mi. S= 315 ft/mi  Kb= .027 Tc = .104 Hr. R = .034
3959          KM   24-HOUR RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
3960          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .991
3961          KM    CLARK UNIT HYDROGRAPH FOR NATURAL WATERSHEDS WAS USED FOR THIS BASIN
3962          BA    .112
3963          LG      .2      .35      4.6      .33      49
3964          UC    .200     .100
3965          UA       0        3        5        8      12      20      43      75      90      96
3966          UA     100
              *
              *
              * DDM   ***** Preserved *****

3967          KK    398F   BASIN
3968          KM   RUNOFF GENERATED ON SUB-BASIN 398F
3969          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3970          KM    L= 2.05 mi. S= 72 ft/mi  Kb= .044 Tc = .575 Hr. R = .880
3971          KM   24-HOUR RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
3972          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .991
3973          KM    CLARK UNIT HYDROGRAPH FOR URBAN WATERSHEDS WAS USED FOR THIS BASIN
3974          BA    .204
3975          LG    0.18     0.17     4.35     0.48      77
3976          UC    .592     .909
3977          UA       0        5       16       30      65      77      84      90      94      97
3978          UA     100
              *
              *
              * *** COMBINE  C398F ***************************************************
              * COMBINE BASIN 398D, 398F, 398BSE AND C398E
              * DDM   ***** Preserved *****

3979          KK   C398F
3980          HC       4     3.68
              *
              *

3981          KK  398FRR
3982          KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #3) IN SUB-BASIN 398F.
3983          KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
3984          KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
3985          KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
3986          KM   SOURCE:  NEW ANALYSIS FOR ARROWHEAD RANCH.
3987          RS       1    ELEV    1292
3988          SV       0   17.52   38.16   59.58   81.39  103.19     125  146.80  168.60
3989          SE    1292  1292.5    1293  1293.5    1294  1294.5    1295  1295.5    1296
3990          SQ       0      47     138     275     429     648     863    1087    1328
              *
              *
              * *** DIVERSION RECOVER D398B ***************************************************
              * RECALL THE DIVERTED FLOW FROM LAKE #2 (398BI)
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3991          KK  D398BW
3992          DR   398BI
              *
              *
              * DDM   ***** Preserved *****

3993          KK    398C   BASIN
3994          KM   RUNOFF GENERATED ON SUB-BASIN 398C
3995          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3996          KM    L= .87 mi. S= 9 ft/mi  Kb= .047 Tc = .821 Hr. R = 1.023
3997          KM   24-HOUR RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
3998          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .991
3999          KM    CLARK UNIT HYDROGRAPH FOR URBAN WATERSHEDS WAS USED FOR THIS BASIN
4000          BA    .094
4001          LG    0.17     0.16     6.20     0.20      59
4002          UC    .846    1.058
4003          UA       0        5       16       30      65      77      84      90      94      97
```

```
4004          UA     100
              *
              *
              * *** COMBINE  C398C ***************************************************
              * COMBINE BASIN 398C AND RETREIVED HYDROGRAPH 398BW
              * DDM   ***** Preserved *****

4005          KK   C398C
4006          HC       2    3.27
              *
              *

4007          KK  398CRR
4008          KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #5) IN SUB-BASIN 398C.
4009          KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
4010          KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
4011          KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
4012          KM   SOURCE:  NEW ANALYSIS FOR ARROWHEAD RANCH.
4013          RS       1    ELEV    1292
4014          SV       0    9.77   19.90   30.41   41.11   51.80   62.50   73.19   83.89
4015          SE    1292  1292.5    1293  1293.5    1294  1294.5    1295  1295.5    1296
4016          SQ       0      46     133     260     403     607     831    1087    1328
              *
              *
              * *** DIVERSION RECOVER D398BSW ********************************************
              * RECALL THE DIVERTED FLOW FROM LAKE #2 (398BSI)
              * DDM   ***** Preserved *****

4017          KK  398BSW
4018          DR  398BSI
              *
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE16:

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4019          KK    398G   BASIN
4020          KM   ASSUME STARTING WATER SURFACE IN LAKE IS AT THE TOP OF WEIR CREST
4021          KM   ELEVATION PER CITY OF GLENDALE (PENTACORE SURVEY).
4022          KM   NOTE: NOT INCLUDE CIRCULATING BLEED-OFF SYSTEM BETWEEN LAKES.
4023          KM   RUNOFF GENERATED ON SUB-BASIN 398G
4024          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
4025          KM    L= 1.21 mi. S= 6 ft/mi  Kb= .043 Tc = 1.258 Hr. R = 1.318
4026          KM   24-HOUR RAINFALL USED TO FIND TC & R FOR THIS BASIN
4027          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .990
4028          KM    CLARK UNIT HYDROGRAPH FOR URBAN WATERSHEDS WAS USED FOR THIS BASIN
4029          BA    .220
4030          LG    0.18    0.18    3.60    0.72      57
4031          UC   1.337   1.410
4032          UA       0       5      16      30      65      77      84      90      94      97
4033          UA     100
              *
              *
              * *** COMBINE  C398G ***************************************************
              * COMBINE C398C, C398E, BASIN 398G, AND DIVERTED HYDROGRAPH 398BSW
              * DDM   ***** Preserved *****

4034          KK   C398G
4035          HC       4    4.09
              *
              *

4036          KK  398GRR
4037          KM   ROUTE FLOW THROUGH DETENTION BASIN (LAKE #4) IN SUB-BASIN 398G.
4038          KM   SOURCE:  NEW ANALYSIS FOR ARROWHEAD RANCH.
4039          RS       1    ELEV    1290
4040          SV       0   20.87   42.58   65.13   88.11  111.08  134.05  157.03  202.97
4041          SE    1290  1290.5    1291  1291.5    1292  1292.5    1293  1293.5    1294
4042          SQ       0     120     346     634     993    1421    1908    2439    3047
              *
              *
              *
              *
```

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                 * DDM   ***** Preserved *****

4043             KK   RM399
4044             KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUB-BASIN 398 THROUGH SUB-BASIN N18
4045             KM            1) Reach Length = 4759 ft.  S= 0.0053
4046             RS       1    FLOW       0
4047             RC    .030    .020    .030    4759  0.0053
4048             RX     0.0     163     453     475     490     590     613     620
4049             RY     9.0     7.0     5.0     3.0     0.0     0.0     6.0       6
                 *
                 *
                 * DDM   ***** Updated *****
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LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4050             KK     N18   BASIN
4051             KM   SUB-BASIN N18
4052             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4053             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .993
4054             KM     L = 1.05  Kb = .038  Adj. Slope =   31.0
4055             BA    .503
4056             LG    0.20    0.29    5.10    0.29      21
4057             UC   0.571   0.329
4058             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4059             UA     100
                 *
                 *
                 * *** COMBINE  CN18 ********************************************************
                 * COMBINE BASIN N18 AND RM399
                 * DDM   ***** Preserved *****

4060             KK    CN18
4061             HC       2
                 *
                 *
                 * *** ROUTE RN18  ********************************************************
                 * ROUTE RN18 IS 3730 FT WITH A SLOPE OF 0.004
                 * CROSS SECTION IS SKUNK CREEK (MEASURED)
                 *
                 * ROUTE FLOW TO CN17 FROM CN18
                 * DDM   ***** Preserved *****

4062             KK    RN18
4063             RS       9    FLOW       0
4064             RC    0.03    0.03    0.03    3730   0.004
4065             RX       0     114     130     145     335     350     380     480
4066             RY      12       9       9       0       0       9       9      12
                 *
                 * DDM   ***** Updated *****

4067             KK     N17   BASIN
4068             KM   SUB-BASIN N17
4069             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4070             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
4071             KM     L = 1.41  Kb = .031  Adj. Slope =   28.0
4072             BA    .415
4073             LG    0.13    0.31    4.60    0.35      24
4074             UC   0.587   0.445
4075             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4076             UA     100
                 *
                 * *** COMBINE  CN17 ********************************************************
                 * *** COMBINE BASIN N17 AND CN18 ******************************************
                 * DDM   ***** Preserved *****
```



```
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4077             KK    CN17
4078             HC       2
                 *
                 * *** ROUTE RN17 ********************************************************
```

```
                *
                * ROUTE RN17 IS 5234 FT WITH A SLOPE OF 0.0044
                * CROSS SECTION IS SKUNK CREEK (MEASURED)
                *
                * *** ROUTE FLOW TO CN16 FROM CN17 ***************************************
                * DDM   ***** Preserved *****

4079            KK    RN17
4080            RS       9    FLOW       0
4081            RC    0.03    0.03    0.03    5234  0.0044
4082            RX       0     114     130     145     255     270     300     500
4083            RY      12       9       9       0       0       9       9      12
                *
                * DDM   ***** Preserved *****

4084            KK     N16   BASIN
4085            KM   SUB-BASIN N16
4086            KM   6-HOUR RAINFALL, PATTERN NO. 1.36 WAS USED TO FIND TC & R FOR THIS BASIN
4087            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .988
4088            KM     L = 1.47  Kb = .039  Adj. Slope =   24.0
4089            BA    .924
4090            LG    0.22    0.24    5.10    0.31      33
4091            UC   0.767   0.392
4092            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4093            UA     100
                *
                * *** COMBINE  CN16 *****************************************************
                * *** COMBINE BASIN N16 AND CN17 *****************************************
                * DDM   ***** Preserved *****

4094            KK    CN16
4095            HC       2
                *
                * *** ROUTE RN16 *********************************************************
                *
                * ROUTE RN16 IS 4011 FT WITH A SLOPE OF 0.0047
                * CROSS SECTION IS THE SKUNK CREEK (MEASURED)
                *
                * *** ROUTE FLOW TO CN15 FROM CN16 ***************************************
                * DDM   ***** Preserved *****

4096            KK    RN16
4097            RS       6    FLOW       0
4098            RC    0.03    0.03    0.03    4011  0.0047
4099            RX       0     114     130     145     255     270     300     400
4100            RY      12       9       9       0       0       9       9      12
                *
                *
                * DDM   ***** Preserved *****
```



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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4101            KK    N15B   BASIN
4102            KM   SUB-BASIN N15B
4103            KM   6-HOUR RAINFALL, PATTERN NO. 1.23 WAS USED TO FIND TC & R FOR THIS BASIN
4104            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
4105            KM     L = 1.65  Kb = .043  Adj. Slope =   26.0
4106            BA    .747
4107            LG    0.24    0.24    5.80    0.23      26
4108            UC   0.863   0.554
4109            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4110            UA     100
                *
                * *** ROUTE RN15B *******************************************************
                *
                * ROUTE RN15B IS 5757 FT WITH A SLOPE OF 0.0028
                * CROSS SECTION IS A SMALL ROAD
                *
                * *** ROUTE FLOW TO CN15A FROM CN15B *************************************
                * DDM   ***** Preserved *****

4111            KK   RN15B
4112            RS      18    FLOW       0
```

```
4113          RC    0.03    0.03    0.03    5757  0.0028
4114          RX       0     222     229     230     274     275     282     504
4115          RY     3.5     1.5    0.25       0       0    0.25     1.5     3.5
              *
              * DDM   ***** Preserved *****

4116          KK    N15A   BASIN
4117          KM   SUB-BASIN N15A
4118          KM   6-HOUR RAINFALL, PATTERN NO. 1.27 WAS USED TO FIND TC & R FOR THIS BASIN
4119          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
4120          KM     L = 1.41  Kb = .032  Adj. Slope =   18.0
4121          BA    .795
4122          LG    0.22    0.16    7.30    0.13      28
4123          UC   0.858   0.526
4124          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4125          UA     100
              *
              *
              * *** STORAGE ROUTING LN15A ***********************************************
              * *** ARROWHEAD RANCH RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *********
              * DDM   ***** Preserved *****

4126          KK   LN15A
4127          DT  LN15AD    54.1
4128          DI       0     100    1000   10000
4129          DQ       0     100    1000   10000
              *
              *
              * *** COMBINE  CN15A *******************************************
              * *** COMBINE BASIN N15A AND CN15B  ****************************
              * DDM   ***** Preserved *****
1                                        HEC-1 INPUT                                    PAGE16

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4130          KK   CN15A
4131          HC       2
              *
              * *** ROUTE RN15A *******************************************************
              *
              * ROUTE RN15A IS 5536 FT WITH A SLOPE OF 0.004
              * CROSS SECTION IS CHANNEL (MEASURED)
              *
              * *** ROUTE FLOW TO CN15 FROM CN15A **************************************
              * DDM   ***** Preserved *****

4132          KK   RN15A
4133          RS       9    FLOW       0
4134          RC    0.04    0.03    0.04    5536   0.004
4135          RX       0     100     395     411     461     485     700     800
4136          RY      12      11      10       0       0      10      11      12
              *
              * DDM   ***** Preserved *****

4137          KK     N15   BASIN
4138          KM   SUB-BASIN N15
4139          KM   6-HOUR RAINFALL, PATTERN NO. 1.04 WAS USED TO FIND TC & R FOR THIS BASIN
4140          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .993
4141          KM     L =  .52  Kb = .039  Adj. Slope =   42.0
4142          BA    .537
4143          LG    0.20    0.25    5.10    0.30      34
4144          UC   0.896   0.646
4145          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4146          UA     100
              *
              * *** COMBINE  CN15 *******************************************
              *  *** COMBINE BASIN N15, RN16, AND RN15A *********************
              * DDM   ***** Preserved *****

4147          KK    CN15
4148          HC       3
              *
              *
              * *** ROUTE RN15  *******************************************************
```

```
                 *
                 * ROUTE RN15 IS 3500 FT WITH A SLOPE OF 0.0063
                 * CROSS SECTION IS THE SKUNK CREEK (MEASURED)
                 *
                 * *** ROUTE FLOW TO CN14 FROM CN15 ****************************************
                 * DDM   ***** Preserved *****

4149             KK    RN15
4150             RS       4    FLOW       0
4151             RC    0.04    0.03    0.04    3500  0.0063
4152             RX       0     114     130     145     274     300     400     700
4153             RY      13      12      12       0       0      12      12      13
                 *
                 *
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE16

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4154             KK    N14A   BASIN
4155             KM   SUB-BASIN N14A
4156             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4157             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .994
4158             KM     L = 1.37  Kb = .042  Adj. Slope =   13.0
4159             BA    .444
4160             LG    0.22    0.26    5.60    0.25      35
4161             UC   0.887   0.662
4162             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4163             UA     100
                 *
                 * *** ROUTE RN14A ********************************************************
                 *
                 * ROUTE RN14A IS 2048 FT WITH A SLOPE OF 0.0117
                 * CROSS SECTION IS A SMALL WASH
                 *
                 * *** ROUTE FLOW TO CN14 FROM CN14A ***************************************
                 * DDM   ***** Preserved *****

4164             KK   RN14A
4165             RS       3    FLOW      12
4166             RC    0.04    0.04    0.04    2048  0.0117
4167             RX       0     100     300     360     380     420     620     720
4168             RY      10       8       6       2       0       6       8      10
                 *
                 * DDM   ***** Updated *****

4169             KK     N14   BASIN
4170             KM   SUB-BASIN N14
4171             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4172             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
4173             KM     L =  .42  Kb = .029  Adj. Slope =   62.0
4174             BA    .077
4175             LG    0.06    0.15    3.88    0.60      88
4176             UC   0.242   0.228
4177             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4178             UA     100
                 *
                 * *** COMBINE  CN14 *******************************************************
                 * *** COMBINE BASIN N14, RN14A, AND RN15  *********************************
                 * DDM   ***** Preserved *****

4179             KK    CN14
4180             HC       3
                 *
                 *
                 * *** ROUTE RN14 **********************************************************
                 *
                 * ROUTE RN14 IS 7133 FT WITH A SLOPE OF 0.0042
                 * CROSS SECTION IS THE SKUNK CREEK (MEASURED)
                 *
                 * *** ROUTE FLOW TO CN08 FROM CN14 ****************************************
                 * DDM   ***** Preserved *****
                                           HEC-1 INPUT                                          PAGE16
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4181          KK    RN14
4182          RS       3    FLOW       0
4183          RC    0.04    0.03    0.04    7133  0.0042
4184          RX       0     114     130     145     397     417     540     700
4185          RY      17      16      16       0       0      16      16      17
              *
              *
              * DDM   ***** Preserved *****

4186          KK    N08B   BASIN
4187          KM   SUB-BASIN N08B
4188          KM   6-HOUR RAINFALL, PATTERN NO. 1.19 WAS USED TO FIND TC & R FOR THIS BASIN
4189          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .991
4190          KM     L = 1.59  Kb = .039  Adj. Slope =   15.0
4191          BA    .699
4192          LG    0.23    0.23    6.20    0.20      36
4193          UC   0.913   0.594
4194          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4195          UA     100
              *
              *
              * *** STORAGE ROUTING LN08B ***********************************************
              * *** ARROWHEAD RANCH RESIDENTIAL DEVELOPMENT (ACCOUNTED) *****************
              * DDM   ***** Preserved *****

4196          KK   LN08B
4197          DT  LN08BD    45.0
4198          DI       0     100    1000   10000
4199          DQ       0     100    1000   10000
              *
              *
              * *** ROUTE RN08B *******************************************************
              * ROUTE RN08B IS 8001 FT WITH A SLOPE OF 0.0036
              * CROSS SECTION IS A ROAD WITH HOMES ON BOTH SIDES
              *
              * *** ROUTE FLOW TO CN08A FROM CN08B *************************************
              * DDM   ***** Preserved *****

4200          KK   RN08B
4201          RS      23    FLOW       0
4202          RC    0.03    0.03    0.03    8001  0.0036
4203          RX       0       1      41      42      82      83     123     124
4204          RY     9.5     1.5    0.25       0       0    0.25     1.5     9.5
              *
              *
              * DDM   ***** Preserved *****

4205          KK    N08A   BASIN
4206          KM   SUB-BASIN N08A
4207          KM   6-HOUR RAINFALL, PATTERN NO. 1.22 WAS USED TO FIND TC & R FOR THIS BASIN
4208          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
4209          KM     L = 1.71  Kb = .040  Adj. Slope =   18.0
4210          BA    .735
4211          LG    0.20    0.23    4.40    0.50      51
1                                           HEC-1 INPUT                                    PAGE17(

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4212          UC   0.983   0.665
4213          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4214          UA     100
              *
              *
              * *** STORAGE ROUTING LN08A ***********************************************
              * *** ARROWHEAD RANCH RESIDENTIAL DEVELOPMENT (ACCOUNTED) *****************
              * DDM   ***** Preserved *****

4215          KK   LN08A
4216          DT  LN08AD    46.3
4217          DI       0     100    1000   10000
4218          DQ       0     100    1000   10000
              *
```

```
                 *
                 * *** COMBINE  CN08A ***************************************************
                 * *** COMBINE BASIN N08A AND RN08B  ***************************************
                 * DDM   ***** Preserved *****

4219             KK   CN08A
4220             HC       2
                 *
                 *
                 * *** ROUTE RN08A *******************************************************
                 * ROUTE RN08A IS 7954 FT WITH A SLOPE OF 0.0058
                 * CROSS SECTION IS A ROAD
                 *
                 * ROUTE FLOW TO CN08 FROM CN08A
                 * DDM   ***** Preserved *****

4221             KK   RN08A
4222             RS       1    FLOW       0
4223             RC     .02     .02     .02    7954  0.0058
4224             RX       0     216     231     242     282     293     308     508
4225             RY       5       4       3       0       0       3       4       5
                 *
                 *
                 * DDM   ***** Preserved *****

4226             KK     N08   BASIN
4227             KM   SUB-BASIN N08
4228             KM   6-HOUR RAINFALL, PATTERN NO. 1.26 WAS USED TO FIND TC & R FOR THIS BASIN
4229             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
4230             KM     L = 1.32  Kb = .025  Adj. Slope =   29.0
4231             BA    .786
4232             LG    0.10    0.27    4.25    0.47      47
4233             UC   0.729   0.499
4234             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4235             UA     100
                 *
                 *
                 * *** COMBINE  CN08  ****************************************************
                 * COMBINE BASIN N08, RN08A, AND RN14
                 * DDM   ***** Preserved *****
                                                HEC-1 INPUT                                    PAGE171

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4236             KK    CN08
4237             HC       3
                 *
                 *
                 * *** ROUTE RN08 ********************************************************
                 * ROUTE RN08 IS 1206 FT WITH A SLOPE OF 0.0025
                 * CROSS SECTION IS SKUNK CREEK (MEASURED)
                 *
                 *  ROUTE FLOW TO CN09 FROM CN08
                 * DDM   ***** Preserved *****

4238             KK    RN08
4239             RS       2    FLOW       0
4240             RC    0.03    0.03    0.03    1206   .0025
4241             RX       0     114     130     145     425     450     580     700
4242             RY      12       9       9       0       0       9       9      12
                 *
                 *
                 * *** COMBINE CN09 ******************************************************
                 * COMBINE RN09* AND CN08
                 * DDM   ***** Preserved *****

4243             KK    CN09
4244             HC       2
                 *
                 *
                 * *** ROUTE RN09 ********************************************************
                 * ROUTE RN09 IS 4452 FT WITH A SLOPE OF 0.0034
                 * CROSS SECTION IS NEW RIVER (MEASURED)
                 *
```

```
                 * ROUTE FLOW TO CN07 FROM CN09
                 * DDM   ***** Preserved *****

4245             KK    RN09
4246             RS       3    FLOW       0
4247             RC    0.04    0.04    0.04    4452  0.0034
4248             RX       0     200     248     300     400     421     469     669
4249             RY      25      24       0       0       0       0      24      25
                 *
                 *
                 * *** DIVERSION RECOVER DRN10  ******************************************
                 * RECOVER DIVERTED FLOW FROM CN10
                 * DDM   ***** Preserved *****

4250             KK   DRN10
4251             DR    N10I
                 *
                 *
                 * *** ROUTE RN10S ******************************************************
                 * ROUTE RN10S IS 1746 FT WITH A SLOPE OF 0.0057
                 * CROSS SECTION IS MAJOR ROAD WITH HOMES ON BOTH SIDES
                 *
                 * ROUTE FLOW TO CX26 FROM CN10
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE17

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4252             KK   RN10S
4253             RS       4    FLOW       0
4254             RC    0.04    0.03    0.04    1746   .0057
4255             RX       0       1      30      31     111     112     141     142
4256             RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
                 *
                 *
                 *
                 * *** DIVERTION CX26 ***************************************************
                 * 91ST AVENUE SOUTH WILL ONLY CARRY THE ROAD FLOW FROM THE WEST SIDE.
                 * WHICH IS 35 CFS
                 * DDM   ***** Preserved *****

4257             KK   DX26O
4258             DT   DX26I
4259             DI       0      91     136     227     273     318     364     409     455     500
4260             DQ       0      56     101     192     238     283     329     374     420     465
                 *
                 *
                 * *** ROUTE RX26S ******************************************************
                 * ROUTE RX26S IS 3763 FT WITH A SLOPE OF 0.0032
                 * CROSS SECTION IS MAJOR ROAD WITH HOMES ON BOTH SIDES
                 *
                 * *** ROUTE FLOW TO CN07 FROM CX26 *************************************
                 * DDM   ***** Preserved *****

4261             KK   RX26S
4262             RS      27    FLOW       0
4263             RC    0.04    0.03    0.04    3763  0.0032
4264             RX       0       1      30      31     111     112     141     142
4265             RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
                 *
                 *
                 * *** RECALL THE DIVERTED FLOW FROM DX26 *******************************
                 * DDM   ***** Preserved *****

4266             KK   DRX26
4267             DR   DX26I
                 *
                 *
                 * DDM   ***** Preserved *****

4268             KK    N07A   BASIN
4269             KM   SUB-BASIN N07A
4270             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4271             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
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```
4272        KM     L =  .61  Kb = .047  Adj. Slope =   28.0
4273        BA    .356
4274        LG    0.24    0.24    4.65    0.37      37
4275        UC   0.421   0.172
4276        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4277        UA     100
            *
            *
            * *** STORAGE ROUTING LN07A ***********************************************
            * *** DESERT HARBOR RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ***********
            * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE17

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4278        KK   LN07A
4279        DT  LN07AD    22.8
4280        DI       0     100    1000   10000
4281        DQ       0     100    1000   10000
            *
            *
            *
            * *** COMBINE  CN07A ****************************************************
            * COMBINE N07A AND DRX26E
            * DDM   ***** Preserved *****

4282        KK   CN07A
4283        HC       2
            *
            *
            *
            * DDM   ***** Preserved *****

4284        KK     N07   BASIN
4285        KM   SUB-BASIN N07
4286        KM   6-HOUR RAINFALL, PATTERN NO. 1.23 WAS USED TO FIND TC & R FOR THIS BASIN
4287        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
4288        KM     L = 1.38  Kb = .041  Adj. Slope =   30.0
4289        BA    .748
4290        LG    0.23    0.21    4.55    0.41      33
4291        UC   0.721   0.393
4292        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4293        UA     100
            *
            *
            * *** COMBINE  CN07 ****************************************************
            * COMBINE LN07A,  BASIN N07,  RX26S, AND RN09
            * DDM   ***** Preserved *****

4294        KK    CN07
4295        HC       4   38.15
            *
            *
            * *** ROUTE RN07 *******************************************************
            * ROUTE RN07 IS 6272 FT WITH A SLOPE OF 0.0027
            * CROSS SECTION IS NEW RIVER (MEASURED)
            *
            * ROUTE FLOW TO CN06 FROM CN07
            * DDM   ***** Preserved *****

4296        KK    RN07
4297        RS      15    FLOW       0
4298        RC     .05     .05     .05    6272  0.0027
4299        RX       0     200     236     400     500     576     612     812
4300        RY      20      18       0       0       0       0      18      20
            *
            *
            * ((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
            * )))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))
            * ((((((                                                        ))))))))
            * ((((((          THE MAIN RUN OF THE AGUA FRIA                 ))))))))
            * ((((((                    IS PLACED HERE                      ))))))))
            * ((((((                                                        ))))))))
            * ((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
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            * ))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))
            *
            *
            *
            * DDM    ***** Preserved *****
                                       HEC-1 INPUT                                              PAGE174

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4301        KK    A11L   BASIN
4302        KM   SUB-BASIN A11L
4303        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4304        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
4305        KM     L =  .67  Kb = .050  Adj. Slope =   45.0
4306        BA     .250
4307        LG    0.35    0.19   11.20    0.02       0
4308        UC   0.333   0.175
4309        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4310        UA     100
            *
            *
            * *** ROUTE RA11L ***********************************************
            * ROUTE RA11L IS 2618 FT WITH A SLOPE OF .0069
            * CROSS SECTION IS A SMALL NATURAL CHANNEL
            *
            * ROUTE FLOW TO CA11I FROM CA11L
            * DDM    ***** Preserved *****

4311        KK   RA11L
4312        RS       6    FLOW       0
4313        RC    0.05    0.06    0.05    2618   .0069
4314        RX       0     350     450     480     482     510     610     910
4315        RY       7       6       5       1       0       5       6       7
            *
            *
            * DDM    ***** Preserved *****

4316        KK    A11M   BASIN
4317        KM   SUB-BASIN A11M
4318        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4319        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
4320        KM     L =  .99  Kb = .050  Adj. Slope =  297.4
4321        BA     .257
4322        LG    0.35    0.27    8.80    0.06       2
4323        UC   0.213   0.143
4324        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4325        UA     100
            *
            *
            * *** ROUTE RA11M ***********************************************
            * ROUTE RA11M IS 2070 FT WITH A SLOPE OF .0092
            * CROSS SECTION IS A SMALL NATURAL CHANNEL
            *
            * ROUTE FLOW TO CA11K FROM CA11M
            * DDM    ***** Preserved *****

4326        KK   RA11M
4327        RS       4    FLOW       0
4328        RC    0.05    0.06    0.05    2070   .0092
4329        RX       0     350     450     480     482     510     610     910
4330        RY       7       6       5       1       0       5       6       7
            *
            *
            * DDM    ***** Preserved *****
1                                      HEC-1 INPUT                                              PAGE175

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4331        KK    A11J   BASIN
4332        KM   SUB-BASIN A11J
4333        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4334        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
4335        KM     L =  .47  Kb = .057  Adj. Slope =   47.0
```

```
4336          BA    .077
4337          LG    0.35    0.26    8.80    0.06       0
4338          UC   0.292   0.222
4339          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4340          UA     100
              *
              *
              * DDM   ***** Preserved *****

4341          KK    A11N   BASIN
4342          KM   SUB-BASIN A11N
4343          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4344          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
4345          KM     L =  .59  Kb = .056  Adj. Slope =  315.0
4346          BA    .082
4347          LG    0.35    0.39    6.20    0.17       1
4348          UC   0.175   0.146
4349          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4350          UA     100
              *
              *
              * *** ROUTE RA11N ***********************************************
              * ROUTE RA11N IS 1142 FT WITH A SLOPE OF .0096
              * CROSS SECTION IS A SMALL NATURAL CHANNEL
              *
              * *** ROUTE FLOW TO CX21 FROM CA11N  **************************
              * DDM   ***** Preserved *****

4351          KK   RA11N
4352          RS       3    FLOW       0
4353          RC    0.05    0.06    0.05    1142  0.0096
4354          RX       0     350     450     480     482     510     610     910
4355          RY       7       6       5       1       0       5       6       7
              *
              *
              * DDM   ***** Preserved *****

4356          KK    A11O   BASIN
4357          KM   SUB-BASIN A11O
4358          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4359          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
4360          KM     L =  .50  Kb = .059  Adj. Slope =  315.0
4361          BA    .057
4362          LG    0.35    0.39    6.20    0.17       1
4363          UC   0.167   0.149
4364          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4365          UA     100
              *
              *
              * *** ROUTE RA11O ***********************************************
              * ROUTE RA11O IS 1549 FT WITH A SLOPE OF .0103
              * CROSS SECTION IS A SMALL NATURAL CHANNEL
              *
              * ROUTE FLOW TO CX21 FROM CA11O
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE176

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4366          KK   RA11O
4367          RS       4    FLOW       0
4368          RC    0.05     .06     .05    1549   .0103
4369          RX       0     350     450     480     482     510     610     910
4370          RY       7       6       5       1       0       5       6       7
              *
              *
              * *** COMBINE  CX21 *****************************************************
              * COMBINE A11N AND A11O
              * DDM   ***** Preserved *****

4371          KK    CX21
4372          HC       2
              *
              *
```

```
                 * *** ROUTE RX21 ************************************************************
                 * ROUTE RX21 IS 1814 FT WITH A SLOPE OF .0055
                 * CROSS SECTION IS A MEDIUM NATURAL CHANNEL
                 *
                 * ROUTE FLOW TO CA11K FROM CX21
                 * DDM   ***** Preserved *****

4373             KK    RX21
4374             RS       5    FLOW       0
4375             RC    0.05    0.06    0.05    1814  0.0055
4376             RX       0      50     250     350     360     420     620     720
4377             RY      10       8       6       2       0       6       8      10
                 *
                 *
                 * DDM   ***** Preserved *****

4378             KK    A11K   BASIN
4379             KM   SUB-BASIN A11K
4380             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4381             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
4382             KM     L =  .65  Kb = .049  Adj. Slope =  138.0
4383             BA    .298
4384             LG    0.35    0.35    4.40    0.38       6
4385             UC   0.229   0.102
4386             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4387             UA     100
                 *
                 *
                 * DDM   ***** Preserved *****

4388             KK    A11G   BASIN
4389             KM   SUB-BASIN A11G
4390             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4391             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
4392             KM     L =  .39  Kb = .058  Adj. Slope =  243.0
4393             BA    .066
4394             LG    0.32    0.29    4.55    0.35      22
4395             UC   0.162   0.109
4396             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
                                                HEC-1 INPUT                                          PAGE17

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4397             UA     100
                 *
                 *
                 * *** DIVERSION DA11G ********************************************************
                 * DIVERTED MAIN NORTH WEST ON WASH SPLIT WEST ALONG JOMAX
                 * FUTURE, NO EXISTING SPLIT
                 * DDM   ***** Preserved *****

4398             KK   DA11G
4399             DT   A11GI
4400             DI       0      45      91     136     182     227     273     500
4401             DQ       0      .1      .2      .3      .4      .5      .6      .7
                 *
                 *
                 * *** ROUTE RA11GN ***********************************************************
                 * ROUTE RA11GN IS 1364 FT WITH A SLOPE OF .022
                 * CROSS SECTION IS A SMALL NATURAL CHANNEL
                 *
                 * *** ROUTE FLOW TO CA11K FROM CA11G  **************************
                 * DDM   ***** Preserved *****

4402             KK  RA11GN
4403             RS       3    FLOW       0
4404             RC    0.05     .06     .05    1364   0.022
4405             RX       0     350     450     480     482     510     610     910
4406             RY       7       6       5       1       0       5       6       7
                 *
                 *
                 * *** COMBINE CA11K ***********************************************************
                 * COMBINE A11K, CA11G, CX21, A11M, AND A11J
                 * DDM   ***** Preserved *****
```

```
4407          KK   CA11K
4408          HC       5
              *
              *
              * *** ROUTE RA11K ***********************************************************
              * ROUTE RA11K IS 1623 FT WITH A SLOPE OF .0055
              * CROSS SECTION IS A MEDIUM NATURAL CHANNEL
              *
              * ROUTE FLOW TO CA11I FROM CA11K
              * DDM   ***** Preserved *****

4409          KK   RA11K
4410          RS       3    FLOW       0
4411          RC    0.05     .06     .05    1623   .0055
4412          RX       0      50     250     350     360     420     620     720
4413          RY      10       8       6       2       0       6       8      10
              *
              *
              * *** DIVERSION RECOVER DA11G  ***********************************************
              * RECOVER DIVERTED FLOW FROM DA11G
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE17

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4414          KK  DRA11G
4415          DR   A11GI
              *
              *
              * *** ROUTE RA11GW ***********************************************************
              * ROUTE RA11GW IS 2816 FT WITH A SLOPE OF .0149
              * CROSS SECTION IS SMALL ROAD WITH A DITCH TO THE WEST SIDE
              *
              * ROUTE FLOW TO CA11I FROM CA11G
              * DDM   ***** Preserved *****

4416          KK  RA11GW
4417          RS       1    FLOW       0
4418          RC    0.05    0.03     .05    2816   .0149
4419          RX       0     200     210     220     240     270     295     595
4420          RY     4.5       2       0       2       3       3     3.5     4.5
              *
              *
              * DDM   ***** Preserved *****

4421          KK    A11I   BASIN
4422          KM   SUB-BASIN A11I
4423          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4424          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
4425          KM     L =  .68  Kb = .049  Adj. Slope =  293.4
4426          BA    .279
4427          LG    0.35    0.29    8.40    0.07       1
4428          UC   0.179   0.083
4429          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4430          UA     100
              *
              *
              * *** COMBINE CA11I *********************************************************
              * COMBINE CA11G, CA11K, A11L, A11I
              * DDM   ***** Preserved *****

4431          KK   CA11I
4432          HC       4
              *
              *
              * *** ROUTE RA11I ************************************************
              * ROUTE RA11I IS 3989 FT WITH A SLOPE OF .0075
              * CROSS SECTION IS A LARGE NATURAL WASH
              *
              * ROUTE FLOW TO CA11E FROM CA11I
              * DDM   ***** Preserved *****

4433          KK   RA11I
4434          RS       7    FLOW       0
```

```
4435          RC    0.05     .06     .05    3989   .0075
4436          RX       0      50     250     320     360     420     620     720
4437          RY      10       8       6       0       0       6       8      10
              *
              *
              * DDM   ***** Preserved *****
                                          HEC-1 INPUT                                                    PAGE17

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4438          KK    A11E   BASIN
4439          KM   SUB-BASIN A11E
4440          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4441          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
4442          KM     L = 1.04  Kb = .049  Adj. Slope =  110.0
4443          BA    .299
4444          LG    0.34    0.34    4.20    0.43       5
4445          UC   0.346   0.234
4446          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4447          UA     100
              *
              *
              * DDM   ***** Preserved *****

4448          KK    A11F   BASIN
4449          KM   SUB-BASIN A11F
4450          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4451          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .994
4452          KM     L = 1.53  Kb = .046  Adj. Slope =  210.5
4453          BA    .466
4454          LG    0.35    0.34    4.35    0.40      14
4455          UC   0.321   0.228
4456          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4457          UA     100
              *
              *
              * *** DIVERSION DA11F ******************************************************
              * DIVERTED  MAIN (TO WASH) DIVERTED (SOUTH)
              *
              * FUTURE DIVERSION: EXISTING FLOW INTO THE CHANNEL
              *
              * DDM   ***** Preserved *****

4458          KK   DA11F
4459          DT   A11FI
4460          DI       0      45      91     136     182     227     273     500    1000    2000
4461          DQ       0      .2      .3      .4      .5      .6      .7      .8       1     1.1
              *
              *
              * *** ROUTE RA11FN ************************************************************
              * ROUTE RA11FN IS 517 FT WITH A SLOPE OF .0039
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              *
              * ROUTE FLOW TO CA11E FROM CA11F
              * DDM   ***** Preserved *****

4462          KK  RA11FN
4463          RS       1    FLOW       0
4464          RC    0.05     .06     .05     517   .0039
4465          RX       0      50     250     350     360     420     620     720
4466          RY      10       8       6       2       0       6       8      10
              *
              *
              * *** COMBINE  CA11E *******************************************************
              * COMBINE  CA11I,  RA11FN, AND A11E
              * DDM   ***** Preserved *****
1                                         HEC-1 INPUT                                                    PAGE18(

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4467          KK   CA11E
4468          HC       3
              *
```

```
                *
                * *** ROUTE RA11E ********************************************
                * ROUTE RA11E IS 2499 FT WITH A SLOPE OF .012
                * CROSS SECTION IS A LARGE NATURAL WASH
                *
                * ROUTE FLOW TO CX23 FROM CA11E
                * DDM   ***** Preserved *****

4469            KK   RA11E
4470            RS       4    FLOW       0
4471            RC    0.05     .06     .05    2499    .012
4472            RX       0      50     250     320     360     420     620     720
4473            RY      10       8       6       0       0       6       8      10
                *
                *
                * DDM   ***** Preserved *****

4474            KK    A11H   BASIN
4475            KM   SUB-BASIN A11H
4476            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4477            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
4478            KM     L =  .41  Kb = .057  Adj. Slope =  315.0
4479            BA    .072
4480            LG    0.35    0.35    4.15    0.44       0
4481            UC   0.154   0.102
4482            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4483            UA     100
                *
                *
                * *** ROUTE RA11H ************************************************************
                * ROUTE RA11H IS 5127 FT WITH A SLOPE OF .0146
                * CROSS SECTION IS A SMALL NATURAL WASH
                *
                * ROUTE FLOW TO CX23 FROM CA11H
                * DDM   ***** Preserved *****

4484            KK   RA11H
4485            RS      13    FLOW       0
4486            RC    0.05     .06     .05    5127   .0146
4487            RX       0     350     450     480     482     510     610     910
4488            RY       7       6       5       1       0       5       6       7
                *
                *
                * *** DIVERSION RECOVER DA09U  ************************************************
                * RECOVER DIVERTED FLOW FROM CA09U
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                    PAGE18
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4489            KK  DRA09U
4490            DR   A09UI
                *
                *
                * *** ROUTE RA09UW ************************************************************
                * ROUTE RA09UW IS 2398 FT WITH A SLOPE OF .0075
                * CROSS SECTION IS A SMALL ROAD WITH A DITCH ON THE WEST SIDE
                * ALONG HAPPY VALLEY RD
                * ROUTE FLOW TO CA09T FROM CA09U
                * DDM   ***** Preserved *****

4491            KK  RA09UW
4492            RS       5    FLOW       0
4493            RC    0.05    0.03     .05    2398   .0075
4494            RX       0     200     210     220     240     270     295     595
4495            RY     4.5       2       0       2       3       3     3.5     4.5
                *
                *
                * DDM   ***** Preserved *****

4496            KK    A09T   BASIN
4497            KM   SUB-BASIN A09T
4498            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4499            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
```

```
4500          KM     L =  .72  Kb = .052  Adj. Slope =   90.0
4501          BA    .181
4502          LG    0.34    0.33    4.30    0.41       1
4503          UC   0.313   0.208
4504          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4505          UA     100
              *
              *
              * *** COMBINE  CA09T ******************************************************
              * COMBINE  CA09U AND A09T
              * DDM   ***** Preserved *****

4506          KK   CA09T
4507          HC       2
              *
              *
              * *** DIVERSION DA09T ******************************************************
              * DIVERTED  MAIN (TO WASH) DIVERTED (SOUTH)
              *
              * HAPPY VALLEY ROAD CAN CARRY 210 CFS TO THE WEST, REMAINING FLOW TO THE SOUTH
              *
              * DDM   ***** Preserved *****

4508          KK   DA09T
4509          DT   A09TI
4510          DI       0      45      91     136     182     227     273     500
4511          DQ       0      .2      .3      .4      .5      17      63     290
              *
              *
              * *** ROUTE RA09TW *********************************************
              * ROUTE RA09TW IS 1615 FT WITH A SLOPE OF .0025
              * CROSS SECTION IS A ROAD WITH A DITCH TO THE WEST SIDE
              * ALOG HAPPY VALLEY RD
              * ROUTE FLOW TO CX22 FROM CA09T
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE18
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4512          KK  RA09TW
4513          RS       4    FLOW       0
4514          RC    0.05    0.03    0.05    1615   .0025
4515          RX       0     200     210     220     230     270     295     595
4516          RY       6       4       0       0       4       4     5.5       7
              *
              *
              * *** DIVERSION RECOVER DRA11F  ********************************************
              * RECOVER DIVERTED FLOW FROM CA11F
              * DDM   ***** Preserved *****

4517          KK  DRA11F
4518          DR   A11FI
              *
              *
              * *** ROUTE RA11FS *********************************************************
              * ROUTE RA11FS IS 1799 FT WITH A SLOPE OF .0011
              * CROSS SECTION IS A ROAD
              *
              * ROUTE FLOW TO CX22 FROM CA11F
              * DDM   ***** Preserved *****

4519          KK  RA11FS
4520          RS       1    FLOW       0
4521          RC    0.05    0.03    0.05    1799   .0011
4522          RX       0     200     300     325     350     375     475     675
4523          RY     4.5     2.5     1.5       0       0     1.5     2.5     4.5
              *
              *
              * *** COMBINE  CX22 ********************************************************
              * COMBINE  CA09T AND CA11F
              * DDM   ***** Preserved *****

4524          KK    CX22
4525          HC       2
```

```
                 *
                 *
                 * *** ROUTE RX22 ***********************************************************
                 * ROUTE RX22 IS 1803 FT WITH A SLOPE OF .0166
                 * CROSS SECTION IS A SMALL NATURAL WASH
                 *
                 * ROUTE FLOW TO CX23 FROM CX22
                 * DDM   ***** Preserved *****

4526             KK    RX22
4527             RS       4    FLOW       0
4528             RC    0.05    0.06    0.05    1803   .0166
4529             RX       0     350     450     480     482     510     610     910
4530             RY       7       6       5       1       0       5       6       7
                 *
                 *
                 * *** COMBINE  CX23 ********************************************************
                 * COMBINE  CX22,  CA11E, AND A11H
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                    PAGE18

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4531             KK    CX23
4532             HC       3
                 *
                 *
                 * *** ROUTE RX23 ***********************************************************
                 * ROUTE RX23 IS 4061 FT WITH A SLOPE OF .0074
                 * CROSS SECTION IS A LARGE NATURAL CHANNEL (MEASURED)
                 *
                 * ROUTE FLOW TO CA11A FROM CX23
                 * DDM   ***** Preserved *****

4533             KK    RX23
4534             RS      11    FLOW       0
4535             RC    0.05     .06     .05    4061   .0074
4536             RX       0      50     250     275     675     700     800     900
4537             RY      12       8       6       0       0       6       8      12
                 *
                 * DDM   ***** Preserved *****

4538             KK    A99Z   BASIN
4539             KM   SUB-BASIN A99Z
4540             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4541             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
4542             KM     L =  .85  Kb = .100  Adj. Slope =  297.5
4543             BA    .155
4544             LG    0.50    0.00    4.40    0.58       4
4545             UC   0.300   0.247
4546             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4547             UA     100
                 *
                 *
                 * *** ROUTE RA99Z ******************************************************
                 * ROUTE RA99Z IS 1995 FT WITH A SLOPE OF .0025
                 * CROSS SECTION IS A DIRT ROAD
                 *
                 * ROUTE FLOW TO CA11D FROM CA99Z
                 * DDM   ***** Preserved *****

4548             KK   RA99Z
4549             RS      11    FLOW       0
4550             RC    0.05    0.05    0.05    1995   .0025
4551             RX       0     100     200     225     250     275     375     475
4552             RY      10       8       6       5       5       6       8      10
                 *
                 *
                 * DDM   ***** Preserved *****

4553             KK    A11D   BASIN
4554             KM   SUB-BASIN A11D
4555             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4556             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
```

```
4557          KM     L =  .68  Kb = .053  Adj. Slope =  171.0
4558          BA    .146
4559          LG    0.34    0.33    3.92    0.49       1
1                                          HEC-1 INPUT                                                          PAGE18

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4560          UC   0.237   0.165
4561          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4562          UA     100
              *
              *
              * *** COMBINE  CA11D ************************************************************
              * Combine  CA99Z, A11D
              * DDM   ***** Preserved *****

4563          KK   CA11D
4564          HC       2
              *
              *
              * *** ROUTE RA11D ***********************************************************
              * ROUTE RA11D IS 3225 FT WITH A SLOPE OF .0006
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              *
              * ROUTE FLOW TO CA11A FROM CA11D
              * DDM   ***** Preserved *****

4565          KK   RA11D
4566          RS      26    FLOW       0
4567          RC    0.05    0.06    0.05    3225   .0006
4568          RX       0      50     250     350     360     420     620     720
4569          RY      10       8       6       2       0       6       8      10
              *
              *
              * DDM   ***** Preserved *****

4570          KK    A11B   BASIN
4571          KM   SUB-BASIN A11B
4572          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4573          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
4574          KM     L = 1.03  Kb = .053  Adj. Slope =  109.0
4575          BA    .146
4576          LG    0.34    0.33    4.20    0.43       1
4577          UC   0.379   0.386
4578          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4579          UA     100
              *
              *
              * DDM   ***** Preserved *****

4580          KK    A11A   BASIN
4581          KM   SUB-BASIN A11A
4582          KM   6-HOUR RAINFALL, PATTERN NO. 1.10 WAS USED TO FIND TC & R FOR THIS BASIN
4583          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .992
4584          KM     L = 1.90  Kb = .045  Adj. Slope =   67.0
4585          BA    .594
4586          LG    0.35    0.35    5.10    0.26       0
4587          UC   0.629   0.497
4588          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4589          UA     100
              *
              *
              * *** COMBINE  CA11A ************************************************************
              * Combine  CX23,  CA11D, A11B, A11A
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                          PAGE18

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4590          KK   CA11A
4591          HC       4
              *
              *
              * *** ROUTE RA11A ***********************************************************
```

```
                 * ROUTE RA11A IS 661 FT WITH A SLOPE OF .0076
                 * CROSS SECTION IS A MEDIUM NATURAL WASH
                 *
                 * ROUTE FLOW TO CA11* FROM CA11A
                 * DDM   ***** Preserved *****

4592             KK   RA11A
4593             RS       1    FLOW       0
4594             RC    0.05     .06     .05     661   .0076
4595             RX       0      50     250     350     360     420     620     720
4596             RY      10       8       6       2       0       6       8      10
                 *
                 *
                 * DDM   ***** Preserved *****

4597             KK    A11C   BASIN
4598             KM   SUB-BASIN A11C
4599             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4600             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
4601             KM     L =  .49  Kb = .054  Adj. Slope =   16.0
4602             BA    .121
4603             LG    0.35    0.35    3.85    0.52       0
4604             UC   0.538   0.350
4605             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4606             UA     100
                 *
                 *
                 *
                 * *** ROUTE RA11C ***********************************************************
                 * ROUTE RA11C IS 2280 FT WITH A SLOPE OF .0044
                 * CROSS SECTION IS A LARGE NATURAL WASH
                 *
                 * ROUTE FLOW TO CA11* FROM CA11C
                 * DDM   ***** Preserved *****

4607             KK   RA11C
4608             RS      12    FLOW       0
4609             RC    0.05     .06     .05    2280   .0044
4610             RX       0      50     250     300     360     420     620     720
4611             RY      10       8       6       0       0       6       8      10
                 *
                 *
                 * *** COMBINE  CA11* ********************************************************
                 * Combine  CA11A, A11C
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE18

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4612             KK   CA11*
4613             HC       2
                 *
                 *
                 * *** ROUTE RA11*   *********************************************************
                 * ROUTE RA11* IS 1266 FT WITH A SLOPE OF .0016
                 * CROSS SECTION IS A LARGE NATURAL WASH
                 *
                 * ROUTE FLOW TO CA11 FROM CA11*
                 * DDM   ***** Preserved *****

4614             KK   RA11*
4615             RS       4    FLOW       0
4616             RC    0.05     .06     .05    1266   .0016
4617             RX       0      50     250     300     360     420     620     720
4618             RY      10       8       6       0       0       6       8      10
                 *
                 *
                 * DDM   ***** Preserved *****

4619             KK     A11   BASIN
4620             KM   SUB-BASIN A11
4621             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4622             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
4623             KM     L =  .46  Kb = .052  Adj. Slope =   15.0
```

```
4624          BA    .162
4625          LG    0.35    0.35    4.20    0.43       0
4626          UC   0.500   0.260
4627          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4628          UA     100
              *
              *
              * *** COMBINE  CA11 ***********************************************************
              * COMBINE  CA11C AND A11
              * AT AGUA FRIA RIVER
              * DDM   ***** Preserved *****

4629          KK    CA11
4630          HC       2
              *
              *
              * *** DIVERSION RECOVER DRN11O  ************************************************
              * RECOVER DIVERTED FLOW FROM CN11O
              * DDM   ***** Preserved *****

4631          KK  DRN11O
4632          DR   N11OI
              *
              *
              * *** ROUTE RN11OW *************************************************************
              * ROUTE RN11OW IS 2752 FT WITH A SLOPE OF .0025
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE18

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4633          KK  RN11OW
4634          RS       1    FLOW       0
4635          RC    0.05     .06     .05    2752   .0025
4636          RX       0      50     250     350     360     420     620     720
4637          RY      10       8       6       2       0       6       8      10
              *
              *
              * *** DIVERSION RECOVER DRA09T  ***********************************************
              * RECOVER DIVERTED FLOW FROM CA09T
              * DDM   ***** Preserved *****

4638          KK  DRA09T
4639          DR   A09TI
              *
              *
              * *** ROUTE RA09TS *************************************************************
              * ROUTE RA09TS IS 2824 FT WITH A SLOPE OF .0057
              * CROSS SECTION IS SHALLOW CONCENTRATED FLOW
              *
              * ROUTE FLOW TO CA09R FROM CA09T
              * DDM   ***** Preserved *****

4640          KK  RA09TS
4641          RS      32    FLOW       0
4642          RC    0.05     .06     .05    2824   .0057
4643          RX       0     400     800    1200    1600    2000    2400    2800
4644          RY       3       1      .5       0       0      .5       1       3
              *
              *
              * DDM   ***** Preserved *****

4645          KK    A09R   BASIN
4646          KM   SUB-BASIN A09R
4647          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4648          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
4649          KM     L =  .45  Kb = .053  Adj. Slope =   47.0
4650          BA    .144
4651          LG    0.35    0.35    4.25    0.42       0
4652          UC   0.521   0.416
4653          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4654          UA     100
              *
```

```
                 *
                 * *** COMBINE  CA09R ***********************************************************
                 * COMBINE  CN11O,  CA09T, AND A09R
                 * DDM   ***** Preserved *****

4655             KK   CA09R
4656             HC       3    0.32
                 *
                 *
                 * *** DIVERSION DA09R ***********************************************************
                 * DIVERTED  MAIN (SOUTH) DIVERTED (WEST)
                 *
                 * FUTURE SPLIT: EXISTING CONDITIONS FLOW DOWN LAKE PLEASANT RD
                 *
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE18

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4657             KK   DA09R
4658             DT   A09RI
4659             DI       0     100     200     300     400     500     600     700     800
4660             DQ       0      .2      .3      .4      .5      .6      .7      .8      .9
                 *
                 *
                 * *** ROUTE RA09RS *************************************************************
                 * ROUTE RA09RS IS 3928 FT WITH A SLOPE OF .0074
                 * CROSS SECTION IS A HIGHWAY
                 *
                 * ROUTE FLOW TO CA09O FROM CA09R
                 * DDM   ***** Preserved *****

4661             KK  RA09RS
4662             RS      14    FLOW       0
4663             RC    0.05    0.04    0.05    3928   .0074
4664             RX       0     100     200     225     250     275     375     475
4665             RY       6       5       4       3       3       4       5       6
                 *
                 *
                 * *** DIVERSION RECOVER DRN11M  ************************************************
                 * RECOVER DIVERTED FLOW FROM CN11M
                 * DDM   ***** Preserved *****

4666             KK  DRN11M
4667             DR   N11MI
                 *
                 *
                 * *** ROUTE RN11MW **************************************************************
                 * ROUTE RN11MW IS 3871 FT WITH A SLOPE OF .0046
                 * CROSS SECTION IS A ROAD WITH HOMES TO THE WEST SIDE
                 *
                 * ROUTE FLOW TO CX4 FROM CN11M
                 * DDM   ***** Preserved *****

4668             KK  RN11MW
4669             RS      19    FLOW       0
4670             RC    0.05    0.04     .05    3871   .0046
4671             RX       0       1      50      51      76      77     102     602
4672             RY      10       2       1    0.75    0.75       1       2     3.5
                 *
                 *
                 * *** DIVERSION RECOVER DRN11J  ************************************************
                 * RECOVER DIVERTED FLOW FROM CN11J
                 * DDM   ***** Preserved *****

4673             KK  DRN11J
4674             DR   N11JI
                 *
                 *
                 * *** ROUTE RN11JW **************************************************************
                 * ROUTE RN11JW IS 1080 FT WITH A SLOPE OF .0019
                 * CROSS SECTION IS A ROAD WITH HOMES TO THE EAST SIDE
                 *
                 * ROUTE FLOW TO CX4 FROM CN11J
```

```
                  * DDM   ***** Preserved *****

LINE              ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4675              KK  RN11JW
4676              KO       3
4677              RS      13    FLOW       0
4678              RC    0.05    0.04     .05    1080   .0019
4679              RX       0     100     200     225     226     249     381     382
4680              RY       6       5       4       3     2.5     2.5     3.5      10
                  *
                  *
                  *
                  *
                  * *** COMBINE  CX4 ************************************************************
                  * *** COMBINE  CN11J AND CN11M ************************************************
                  * DDM   ***** Preserved *****

4681              KK     CX4
4682              HC       2    0.39
                  *
                  * *** ROUTE RX4 ***************************************************************
                  *
                  * ROUTE RX4 IS 2164 FT WITH A SLOPE OF .0023
                  * CROSS SECTION IS A RURAL ROAD
                  *
                  * *** ROUTE FLOW TO CA09O FROM CX4  ****************************
                  * DDM   ***** Preserved *****

4683              KK     RX4
4684              RS      15    FLOW       0
4685              RC    0.05    0.04    0.05    2164  0.0023
4686              RX       0     200     210     220     240     250     260     460
4687              RY     3.5     1.5       0     1.5     1.5       0     1.5     3.5
                  *
                  * DDM   ***** Preserved *****

4688              KK    A09O   BASIN
4689              KM   SUB-BASIN A09O
4690              KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4691              KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
4692              KM     L =  .97  Kb = .051  Adj. Slope =   33.0
4693              BA    .194
4694              LG    0.34    0.33    4.40    0.38       1
4695              UC   0.621   0.542
4696              UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4697              UA     100
                  *
                  * *** COMBINE  CA09O *********************************************************
                  * *** COMBINE  CX4,  CA09R, AND A09O ******************************************
                  * DDM   ***** Preserved *****

4698              KK   CA09O
4699              HC       3     0.9
                  *
                  * *** DIVERSION DA09O *********************************************************
                  * *** DIVERTED  MAIN (SOUTH) DIVERTED (WEST)  ****************************
                  *
                  * FUTURE SPLIT: EXISTING CONDITIONS FLOW TO THE SOUTH
                  *
                  * DDM   ***** Preserved *****
```



```
LINE              ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4700              KK   DA09O
4701              DT   A09OI
4702              DI       0     100     200     300     400     500     600     700
4703              DQ       0      .2      .3      .4      .5      .6      .7      .8
                  *
                  * *** ROUTE RA09OS ************************************************************
                  *
```

```
                 * ROUTE RA09OS IS 5602 FT WITH A SLOPE OF .0062
                 * CROSS SECTION IS A RURAL ROAD WITH A DITCH RIGHT
                 *
                 * *** ROUTE FLOW TO CX7 FROM CA09O  ****************************
                 * DDM   ***** Preserved *****

4704             KK  RA09OS
4705             RS      15    FLOW       0
4706             RC     .03     .03     .03    5602    .0062
4707             RX       0     200     220   227.5     235     255     300     460
4708             RY       4       2       0       0       2     2.5       3       4
                 *
                 * *** DIVERSION RECOVER DRN11G  ***********************************************
                 * *** RECOVER DIVERTED FLOW FROM CN11G ****************************************
                 * DDM   ***** Preserved *****

4709             KK  DRN11G
4710             DR   N11GI
                 *
                 * *** ROUTE RN11GW ************************************************************
                 *
                 * ROUTE RN11GW IS 2318 FT WITH A SLOPE OF .0017
                 * CROSS SECTION IS A DIRT ROAD
                 *
                 * *** ROUTE FLOW TO CA09K FROM CN11G  **************************
                 * DDM   ***** Preserved *****

4711             KK  RN11GW
4712             RS       1    FLOW       0
4713             RC    0.05    0.05    0.05    2318  0.0017
4714             RX       0     200     210     220     240     250     260     460
4715             RY     3.5     1.5       0       1       1       0     1.5     3.5
                 *
                 * DDM   ***** Preserved *****

4716             KK    A09K   BASIN
4717             KM   SUB-BASIN A09K
4718             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4719             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
4720             KM     L = 1.12  Kb = .047  Adj. Slope =   37.0
4721             BA    .412
4722             LG    0.35    0.35    4.40    0.38       0
4723             UC   0.592   0.375
4724             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4725             UA     100
                 *
                 * *** COMBINE  CA09K ******************************************************
                 * *** COMBINE  CN11G, A09K ************************************************
                 * DDM   ***** Preserved *****
```



```
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4726             KK   CA09K
4727             HC       2
                 *
                 * *** DIVERSION DA09K ******************************************************
                 * *** DIVERTED  MAIN (WEST) DIVERTED (SOUTH)  ***************************
                 *
                 * 20% FLOW IS DIVERTED TO THE WEST
                 *
                 * DDM   ***** Preserved *****

4728             KK   DA09K
4729             DT   A09KI
4730             DI       0       1      10      30      50     100     500    1000    2000
4731             DQ       0      .8       8      24      40      80     400     800    1600
                 *
                 * *** ROUTE RA09KW ************************************************************
                 *
                 * ROUTE RA09KW IS 1473 FT WITH A SLOPE OF .0014
                 * CROSS SECTION IS A DIRT ROAD
                 *
                 * *** ROUTE FLOW TO CX7 FROM CA09K  ****************************
```

```
                 * DDM   ***** Preserved *****

4732             KK  RA09KW
4733             RS      15    FLOW       0
4734             RC    0.05    0.05    0.05    1473  0.0014
4735             RX       0     200     210     220     240     250     260     460
4736             RY     3.5     1.5       0       1       1       0     1.5     3.5
                 *
                 * *** COMBINE  CX7 ***********************************************************
                 * *** COMBINE  CA09K AND CA09O ************************************************
                 * DDM   ***** Preserved *****

4737             KK     CX7
4738             HC       2    1.31
                 *

4739             KK     DX7
4740             DT     X7I
4741             DI       0       1     100     200     300     400     500     600    2000
4742             DQ       0      .1      .2      .3      .4      .5      .6      .7      .8
                 *
                 * *** ROUTE RX7S **************************************************************
                 *
                 * ROUTE RX7S IS 860 FT WITH A SLOPE OF .0035
                 * CROSS SECTION IS A HIGHWAY WITH A DITCH RIGHT
                 *
                 * *** ROUTE FLOW TO CX25 FROM CX7  ****************************
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE19

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4743             KK    RX7S
4744             KO       3
4745             RS       2    FLOW       0
4746             RC    0.05    0.04    0.05     860  0.0035
4747             RX       0     200     220   227.5     235     255     300     460
4748             RY       4       2       2       0       2     2.5       3       4
                 *
                 * *** Diversion DX25 **********************************************************
                 * DIVERT RX25 (MAIN FLOW SOUTH ALONG ROADWAY)
                 *
                 *
                 *
                 * DDM   ***** Preserved *****

4749             KK    DX25
4750             DT   AX25I
4751             DI       0       1      10     100     200     300     400     500     600
4752             DQ       0     .25     2.5      25      65     100     110     110     110
                 *
                 * *** ROUTE THE MAIN FLOW TO CA09H  ***********************************
                 *
                 *
                 * *** ROUTE RX25E *************************************************************
                 *
                 * ROUTE RX25E IS 1817 FT WITH A SLOPE OF .0039
                 * CROSS SECTION IS A RURAL HIGHWAY WITH A DITCH RIGHT
                 *
                 * *** ROUTE FLOW TO CA09H FROM CX25  ***************************
                 * DDM   ***** Preserved *****

4753             KK   RX25E
4754             KO       3
4755             RS       4    FLOW       0
4756             RC     .03     .03     .03    1817  0.0039
4757             RX       0     200     220   227.5     235     255     300     460
4758             RY       4       2       2       0       2     2.5       3       4
                 *
                 * RECALL THE DIVERTED FLOW FROM DX25
                 *
                 * DDM   ***** Preserved *****

4759             KK   DRX25
```

```
4760          DR   AX25I
              *
              *
              * *** ROUTE RX25W ***********************************************************
              *
              * ROUTE RX25W IS 2604 FT WITH A SLOPE OF .0027
              * CROSS SECTION IS A SMALL CHANNEL
              *
              * *** ROUTE FLOW TO CA09H FROM CX25  **************************
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE19

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4761          KK   RX25W
4762          RS      11    FLOW       0
4763          RC    0.05    0.05     .05    2604  0.0027
4764          RX       0     200     400     420     440     460     660     860
4765          RY       6       5       4       0       0       4       5       6
              *
              * *** DIVERSION RECOVER DRA09K  ***********************************************
              * *** RECOVER DIVERTED FLOW FROM CA09K ****************************************
              * DDM   ***** Preserved *****

4766          KK  DRA09K
4767          DR   A09KI
              *
              * *** ROUTE RA09KS ***********************************************************
              *
              * ROUTE RA09KS IS 2831 FT WITH A SLOPE OF .0057
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              *
              * *** ROUTE FLOW TO CA09G FROM CA09K  **************************
              * DDM   ***** Preserved *****

4768          KK  RA09KS
4769          RS       8    FLOW       0
4770          RC    0.05     .06     .05    2831   .0057
4771          RX       0     100     300     360     380     420     620     720
4772          RY      10       8       6       2       0       6       8      10
              *
              * DDM   ***** Preserved *****

4773          KK    A09G   BASIN
4774          KM   SUB-BASIN A09G
4775          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4776          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
4777          KM     L =  .57  Kb = .050  Adj. Slope =   30.0
4778          BA    .221
4779          LG    0.35    0.35    4.30    0.41       0
4780          UC   0.408   0.206
4781          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4782          UA     100
              *
              *
              * *** DIVERSION DA09G *******************************************************
              * *** DIVERTED  MAIN (WEST) DIVERTED (SOUTH)  **************************
              *
              * 40% OF THE FLOW FROM BASIN A09G WILL FLOW TO THE WEST
              *
              * DDM   ***** Preserved *****

4783          KK   DA09G
4784          DT   A09GI
4785          DI       0      10      30      50     100     500    1000    2000
4786          DQ       0       6      18      30      60     300     600    1200
              *
              * *** COMBINE  CA09G *********************************************************
              * *** COMBINE  CA09K AND A09G *************************************************
              * DDM   ***** Preserved *****
                                           HEC-1 INPUT                                                    PAGE194

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
4787          KK   CA09G
4788          HC       2    0.63
              *
              * *** ROUTE RA09GW   ************************************************************
              *
              * ROUTE RA09GW IS 1045 FT WITH A SLOPE OF .001
              * CROSS SECTION IS A ROAD WITH A WALL ON THE WEST SIDE
              *
              * *** ROUTE FLOW TO CA09H FROM CA09G  **************************
              * DDM   ***** Preserved *****

4789          KK  RA09GW
4790          KO       3
4791          RS       5    FLOW       0
4792          RC    0.05    0.04    0.05    1045    .001
4793          RX       0       1      11      21      46      56      76     576
4794          RY      10       2       0       2       2       0       2     3.5
              *
              * DDM   ***** Preserved *****

4795          KK    A09J   BASIN
4796          KM   SUB-BASIN A09J
4797          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4798          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
4799          KM     L =  .68  Kb = .052  Adj. Slope =   31.0
4800          BA    .168
4801          LG    0.34    0.35    4.35    0.39       0
4802          UC   0.471   0.326
4803          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4804          UA     100
              *
              * *** DIVERSION RECOVER DRX7  ***********************************************
              * *** RECOVER DIVERTED FLOW FROM CX7 ****************************************
              * DDM   ***** Preserved *****

4805          KK    DRX7
4806          DR     X7I
              *
              * *** ROUTE RX7W ***************************************************************
              *
              * ROUTE RX7W IS 1268 FT WITH A SLOPE OF .0008
              * CROSS SECTION IS A SMALL NATURAL CHANNEL
              *
              * *** ROUTE FLOW TO CA09J FROM CX7  ****************************
              * DDM   ***** Preserved *****

4807          KK    RX7W
4808          KO       3
4809          RS       1    FLOW       0
4810          RC    0.05     .06     .05    1268   .0008
4811          RX       0     350     450     480     482     510     610     910
4812          RY       7       6       5       1       0       5       6       7
              *
              * *** COMBINE  CA09J ***********************************************************
              * *** COMBINE  CX7 AND A09J *****************************************************
              * DDM   ***** Preserved *****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4813          KK   CA09J
4814          HC       2
              *
              * *** DIVERSION DA09J ***********************************************************
              * *** DIVERTED  MAIN (SOUTH), DIVERTED (WEST)  ****************************
              *
              * FUTURE SPLIT: EXISTING CONDITIONS FLOW SOUTH
              *
              * DDM   ***** Preserved *****

4815          KK   DA09J
4816          DT   A09JI
4817          DI       0      10      30      50     100     500    1000    2000
```

```
4818        DQ       0       .2       .3       .4       .5       .6       .7       .8
            *
            * *** ROUTE RA09JS ***********************************************************
            *
            * ROUTE RA09JS IS 3199 FT WITH A SLOPE OF .0044
            * CROSS SECTION IS A SMALL NATURAL CHANNEL
            *
            * *** ROUTE FLOW TO CA09H FROM CA09J  *************************
            * DDM   ***** Preserved *****

4819        KK  RA09JS
4820        KO       3
4821        RS      11    FLOW       0
4822        RC    0.05     .06     .05    3199   .0044
4823        RX       0     350     450     480     482     510     610     910
4824        RY       7       6       5       1       0       5       6       7
            *
            *
            * DDM   ***** Preserved *****

4825        KK    A09H   BASIN
4826        KM   SUB-BASIN A09H
4827        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4828        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
4829        KM     L =  .63  Kb = .049  Adj. Slope =   19.0
4830        BA    .245
4831        LG    0.34    0.35    4.55    0.35       0
4832        UC   0.504   0.256
4833        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4834        UA     100
            *
            * *** COMBINE  CA09H ***********************************************************
            * *** COMBINE BASIN A09H, RA09JS, RX25W, RX25E, AND RA09GW   *******************
            * DDM   ***** Preserved *****

4835        KK   CA09H
4836        HC       5
            *
            *
            * *** ROUTE RA09H *************************************************************
            *
            * ROUTE RA09H IS 2604 FT WITH A SLOPE OF .0019
            * CROSS SECTION IS A RURAL HIGHWAY
            *
            * ROUTE FLOW TO CA09F FROM CA09H
            * DDM   ***** Preserved *****
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4837        KK   RA09H
4838        KO       3
4839        RS      15    FLOW       0
4840        RC    0.05    0.04     .05    2604   .0019
4841        RX       0     200     300     325     340     360     380     880
4842        RY       5       4       3       2       3       3       2     3.5
            *
            * *** DIVERSION RECOVER DRA09G  ***********************************************
            * *** RECOVER DIVERTED FLOW FROM CA09G ****************************************
            * DDM   ***** Preserved *****

4843        KK  DRA09G
4844        DR   A09GI
            *
            *
            * *** ROUTE RA09GS ************************************************************
            *
            * ROUTE RA09GS IS 3990 FT WITH A SLOPE OF .0015
            * CROSS SECTION IS A MEDIUM ROADSIDE CHANNEL
            *
            * ROUTE FLOW TO CA09F FROM CA09G
            * DDM   ***** Preserved *****

4845        KK  RA09GS
```

```
4846          KO       3
4847          RS      17    FLOW       0
4848          RC    0.04    0.04    0.04    3990   .0015
4849          RX       0     200     220     240     260     280     320     520
4850          RY       6       4       0       0       3       4       4       6
              *
              * DDM   ***** Preserved *****

4851          KK    A09F   BASIN
4852          KM   SUB-BASIN A09F
4853          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4854          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
4855          KM     L =  .90  Kb = .039  Adj. Slope =   18.0
4856          BA    .365
4857          LG    0.19    0.30    5.30    0.25      21
4858          UC   0.583   0.332
4859          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4860          UA     100
              *
              *
              * *** STORAGE ROUTING LA09F ***********************************************
              * *** PARKRIDGE ESTATES RESIDENTIAL DEVELOPMENT (ACCOUNTED) ***************
              * DDM   ***** Preserved *****

4861          KK   LA09F
4862          DT  LA09FD    15.0
4863          DI       0     100    1000   10000
4864          DQ       0     100    1000   10000
              *
              *
              *
              * *** COMBINE  CA09F ******************************************************
              * *** COMBINE  CA09G, CA09H, AND A09F *************************************
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4865          KK   CA09F
4866          HC       3
              *
              * *** DIVERSION DA09F *****************************************************
              * *** DIVERTED  MAIN (WEST), DIVERTED (SOUTH)  ****************************
              *
              * BEARDSLEY ROAD CHANNEL TO THE WEST. EXCESS FLOW TO THE SOUTH.
              *
              * DDM   ***** Preserved *****

4867          KK   DA09F
4868          DT   A09FI
4869          DI       0      10      30      50     100     500     700    1000
4870          DQ       0      .2      .3      .4      .5      80     250     500
              *
              *
              *
              * ***************************************************************************
              * ********************   BEARDSLEY RD DRAINAGE    ******************************
              * ***************************************************************************
              *
              * *** ROUTE RA09FW ********************************************************
              *
              * ROUTE RA09FW IS 3031 FT WITH A SLOPE OF .002
              * CROSS SECTION IS BEARDSLEY CHANNEL (MEASURED)
              *
              * *** ROUTE FLOW TO CA09E FROM CA09F  **************************
              * DDM   ***** Preserved *****

4871          KK  RA09FW
4872          KO       3
4873          RS       6    FLOW       0
4874          RC    0.04    0.03    0.04    3031   0.002
4875          RX       0       1      16      36      51     123     148     648
4876          RY      16       8       0       0       8       8       9      11
              *
```

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                 * DDM   ***** Preserved *****

4877             KK    A09I   BASIN
4878             KM   SUB-BASIN A09I
4879             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4880             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
4881             KM     L =  .52  Kb = .049  Adj. Slope =   19.0
4882             BA    .167
4883             LG    0.25    0.27    6.20    0.19      23
4884             UC   0.438   0.242
4885             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4886             UA     100
                 *
                 *
                 * *** STORAGE ROUTING LA09I ***********************************************
                 * *** ROSE GARDEN RESIDENATIAL DEVELOPMENT STORAGE (ACCOUNTED) ************
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE19

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4887             KK   LA09I
4888             DT  LA09ID     9.8                                                                      G
4889             DI       0     100    1000   10000
4890             DQ       0     100    1000   10000
                 *
                 *
                 * *** DIVERSION DA09I *****************************************************
                 * *** DIVERTED  MAIN (WEST), DIVERTED (SOUTH)  ****************************
                 *
                 * THE FLOW GOES TO THE WEST
                 *
                 * DDM   ***** Preserved *****

4891             KK   DA09I
4892             DT   A09II
4893             DI       0      10      30      50     100     500    1000    2000
4894             DQ       0     9.8    29.5    49.2    99.1     499     998    1997
                 *
                 * *** ROUTE RA09IS   ******************************************************
                 *
                 * ROUTE RA09IS IS 2683 FT WITH A SLOPE OF .0011
                 * CROSS SECTION IS A CHANNEL AND A ROAD (MEASURED)
                 *
                 * *** ROUTE FLOW TO CA09E FROM CA09I  *************************
                 * DDM   ***** Preserved *****

4895             KK  RA09IS
4896             KO       3
4897             RS       1    FLOW       0
4898             RC    0.04    0.04    0.04    2683  0.0011
4899             RX       0       1      41     111     126     136     151     551
4900             RY      15       7       6       6       0       0       6       8
                 *
                 * DDM   ***** Preserved *****

4901             KK    A09E   BASIN
4902             KM   SUB-BASIN A09E
4903             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4904             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
4905             KM     L =  .60  Kb = .046  Adj. Slope =   15.0
4906             BA    .147
4907             LG    0.19    0.26    4.70    0.34      32
4908             UC   0.708   0.629
4909             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
4910             UA     100
                 *
                 *
                 * *** STORAGE ROUTING LA09E ***********************************************
                 * *** VENTANA LAKES RESIDENTIAL DEVELOPMENT (ACCOUNTED) *******************
                 * DDM   ***** Preserved *****
                                           HEC-1 INPUT                                                    PAGE19

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
4911          KK   LA09E
4912          DT  LA09ED     8.8
4913          DI       0     100    1000   10000
4914          DQ       0     100    1000   10000
              *
              *
              * *** COMBINE  CA09E ***********************************************************
              * *** COMBINE  CA09I,  CA09F, AND A99E ****************************************
              * DDM   ***** Preserved *****

4915          KK   CA09E
4916          HC       3    2.87
              *
              *
              * *** ROUTE RA09E   ************************************************************
              *
              * ROUTE RA09E IS 2700 FT WITH A SLOPE OF .0041
              * CROSS SECTION IS BEARDSLEY CHANNEL (MEASURED)
              *
              * ROUTE FLOW TO CA09C FROM CA09E
              * DDM   ***** Preserved *****

4917          KK   RA09E
4918          RS       4    FLOW       0
4919          RC    0.04    0.03    0.04    2700   .0041
4920          RX       0       1      16      36      51     123     148     648
4921          RY      16       8       0       0       8       8       9      11
              *
              * DDM   ***** Preserved *****

4922          KK    A09S   BASIN
4923          KM   SUB-BASIN A09S
4924          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4925          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
4926          KM     L =  .38  Kb = .057  Adj. Slope =   37.0
4927          BA    .069
4928          LG    0.35    0.35    4.80    0.30       0
4929          UC   0.296   0.203
4930          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4931          UA     100
              *
              * *** DIVERSION RECOVER DRA09R  ***********************************************
              * *** RECOVER DIVERTED FLOW FROM CA09R ****************************************
              * DDM   ***** Preserved *****

4932          KK  DRA09R
4933          DR   A09RI
              *
              * *** ROUTE RA09RW *************************************************************
              *
              * ROUTE RA09RW IS 1609 FT WITH A SLOPE OF .0012
              * CROSS SECTION IS A DIRT ROAD
              *
              * *** ROUTE FLOW TO CA09S FROM CA09R  *************************
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4934          KK  RA09RW
4935          RS       1    FLOW       0
4936          RC    0.05    0.04     .05    1609  0.0012
4937          RX       0     200     300     325     340     360     380     880
4938          RY       5       4       3       2       3       3       2     3.5
              *
              * *** COMBINE  CA09S ***********************************************************
              * *** COMBINE  CA09R AND A09S **************************************************
              * DDM   ***** Preserved *****

4939          KK   CA09S
4940          HC       2
              *
              * *** DIVERSION DA09S ***********************************************************
```

```
                 * *** DIVERTED  MAIN (SOUTH), DIVERTED (WEST)  ****************************
                 *
                 * FUTURE SPLIT: ALL EXISTING FLOW TO THE SOUTH
                 *
                 * DDM   ***** Preserved *****

4941             KK   DA09S
4942             DT   A09SI
4943             DI       0      10      30      50     100     500    1000    2000
4944             DQ       0      .2      .3      .4      .5      .6      .7      .8
                 *
                 * *** ROUTE RA09SS ***************************************************************
                 *
                 * ROUTE RA09SS IS 4204 FT WITH A SLOPE OF .0095
                 * CROSS SECTION IS A MEDIUM NATURAL WASH
                 *
                 * *** ROUTE FLOW TO CA09Q FROM CA09S  **************************
                 * DDM   ***** Preserved *****

4945             KK  RA09SS
4946             RS      15    FLOW       0
4947             RC    0.05     .06     .05    4204  0.0095
4948             RX       0     100     300     360     380     420     620     720
4949             RY      10       8       6       2       0       6       8      10
                 *
                 * DDM   ***** Preserved *****

4950             KK    A09Q   BASIN
4951             KM   SUB-BASIN A09Q
4952             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4953             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
4954             KM     L =  .82  Kb = .050  Adj. Slope =   46.0
4955             BA    .219
4956             LG    0.33    0.30    4.15    0.44       2
4957             UC   0.458   0.315
4958             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4959             UA     100
                 *
                 * DDM   ***** Preserved *****
```



```
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4960             KK    A09P   BASIN
4961             KM   SUB-BASIN A09P
4962             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4963             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
4964             KM     L =  .94  Kb = .052  Adj. Slope =   31.0
4965             BA    .177
4966             LG    0.35    0.35    4.65    0.32       0
4967             UC   0.600   0.536
4968             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
4969             UA     100
                 *
                 * *** DIVERSION RECOVER DRA09O  ***********************************************
                 * *** RECOVER DIVERTED FLOW FROM CA09O ****************************************
                 * DDM   ***** Preserved *****

4970             KK  DRA09O
4971             DR   A09OI
                 *
                 * *** ROUTE RA09OW ***************************************************************
                 *
                 * ROUTE RA09OW IS 1076 FT WITH A SLOPE OF .0019
                 * CROSS SECTION IS A SMALL NATURAL WASH
                 *
                 * *** ROUTE FLOW TO CA09P FROM CA09O  **************************
                 * DDM   ***** Preserved *****

4972             KK  RA09OW
4973             RS       1    FLOW       0
4974             RC    0.05     .06     .05    1076  0.0019
4975             RX       0     350     450     480     482     510     610     910
4976             RY       7       6       5       1       0       5       6       7
```

```
                 *
                 * *** COMBINE  CA09P ************************************************************
                 * *** COMBINE  CA09O AND A09P ***************************************************
                 * DDM   ***** Preserved *****

4977             KK   CA09P
4978             HC       2
                 *
                 * *** ROUTE RA09P ***************************************************************
                 *
                 * ROUTE RA09P IS 884 FT WITH A SLOPE OF .0136
                 * CROSS SECTION IS A SMALL NATURAL WASH
                 *
                 * *** ROUTE FLOW TO CA09Q FROM CA09P  **************************
                 * DDM   ***** Preserved *****

4979             KK   RA09P
4980             RS       2    FLOW       0
4981             RC    0.05     .06     .05     884  0.0136
4982             RX       0     350     450     480     482     510     610     910
4983             RY       7       6       5       1       0       5       6       7
                 *
                 * *** COMBINE  CA09Q ************************************************************
                 * *** COMBINE  CA09P, CA09S, AND A09Q *******************************************
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE20

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4984             KK   CA09Q
4985             HC       3
                 *
                 * *** DIVERSION DA09Q ************************************************************
                 * *** DIVERTED  MAIN (SOUTH), DIVERTED (WEST)  ***************************
                 *
                 * FUTURE SPLIT: ALL EXISTING FLOW TO THE SOUTH
                 *
                 * DDM   ***** Preserved *****

4986             KK   DA09Q
4987             DT   A09QI
4988             DI       0      10      30      50     100     500    1000    2000
4989             DQ       0      .2      .3      .4      .5      .6      .7      .8
                 *
                 * *** ROUTE RA09QS ***************************************************************
                 *
                 * ROUTE RA09QS IS 1655 FT WITH A SLOPE OF .0073
                 * CROSS SECTION IS A MEDIUM NATURAL WASH
                 *
                 * *** ROUTE FLOW TO CA09M FROM CA09Q  **************************
                 * DDM   ***** Preserved *****

4990             KK  RA09QS
4991             RS       4    FLOW       0
4992             RC    0.05     .06     .05    1655  0.0073
4993             RX       0      50     250     350     360     420     620     720
4994             RY      10       8       6       2       0       6       8      10
                 *
                 * DDM   ***** Preserved *****

4995             KK    A09M   BASIN
4996             KM   SUB-BASIN A09M
4997             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
4998             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
4999             KM     L =  .77  Kb = .036  Adj. Slope =   60.0
5000             BA    .247
5001             LG    0.21    0.35    4.45    0.34       6
5002             UC   0.300   0.175
5003             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5004             UA     100
                 *
                 *
                 * *** STORAGE ROUTING LA09M ******************************************************
                 * *** IRONWOOD RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) ****************
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```
                 * DDM   ***** Preserved *****

5005             KK   LA09M
5006             DT  LA09MD     8.2
5007             DI       0     100    1000   10000
5008             DQ       0     100    1000   10000
                 *
                 * *** COMBINE  CA09M ***********************************************************
                 * *** COMBINE  CA09Q AND A09M ***************************************************
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE20

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5009             KK   CA09M
5010             HC       2
                 *
                 * *** ROUTE RA09M ***************************************************************
                 *
                 * ROUTE RA09M IS 1102 FT WITH A SLOPE OF .0064
                 * CROSS SECTION IS A CHANNEL (MEASURED)
                 *
                 * *** ROUTE FLOW TO CA09N FROM CA09M  **************************
                 * DDM   ***** Preserved *****

5011             KK   RA09M
5012             KO       3
5013             RS       2    FLOW       0
5014             RC    0.05    0.04     .05    1102  0.0064
5015             RX       0       1      21      41      51      71     101     102
5016             RY      10       4       0       4       5       6       6      10
                 *
                 * DDM   ***** Preserved *****

5017             KK    A09N   BASIN
5018             KM   SUB-BASIN A09N
5019             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5020             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
5021             KM     L =  .48  Kb = .038  Adj. Slope =    4.0
5022             BA    .110
5023             LG    0.18    0.36    5.80    0.18       9
5024             UC   0.683   0.474
5025             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
5026             UA     100
                 *
                 *
                 * *** STORAGE ROUTING LA09N ***********************************************
                 * *** ALTA VISTA RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) **************
                 * DDM   ***** Preserved *****

5027             KK   LA09N
5028             DT  LA09ND     5.3
5029             DI       0     100    1000   10000
5030             DQ       0     100    1000   10000
                 *
                 *
                 * *** COMBINE BASIN A09N AND ROUTE RA09M  *********************************
                 *

5031             KK   CA09N
5032             HC       2
                 *
                 * *** ROUTE RA09N ***************************************************************
                 *
                 * ROUTE RA09N IS 2382 FT WITH A SLOPE OF .0017
                 * CROSS SECTION IS A CHANNEL (MEASURED)
                 *
                 * *** ROUTE FLOW TO CA09L FROM CA09N  **************************
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE204

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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5033          KK   RA09N
5034          RS       6    FLOW       0
5035          RC    0.05    0.04     .05    2382  0.0017
5036          RX       0       1      15      17      31      59     128     148
5037          RY      12       4       0       0       4     3.5     5.5     7.5
              *
              * *** DIVERSION RECOVER DRA09J  ***********************************************
              * *** RECOVER DIVERTED FLOW FROM CA09J ****************************************
              * DDM   ***** Preserved *****

5038          KK  DRA09J
5039          DR   A09JI
              *
              * *** ROUTE RA09JW ************************************************************
              *
              * ROUTE RA09JW IS 1749 FT WITH A SLOPE OF .0063
              * CROSS SECTION IS A CHANNEL ON THE WEST SIDE OF A ROAD
              *
              * *** ROUTE FLOW TO CA09L FROM CA09J  *************************
              * DDM   ***** Preserved *****

5040          KK  RA09JW
5041          RS       1    FLOW       0
5042          RC    0.04    0.03    0.04    1749  0.0063
5043          RX       0       1      21      31      41      51      81     281
5044          RY      14       6       6       0       0       6       6       8
              *
              * DDM   ***** Preserved *****

5045          KK    A09L   BASIN
5046          KM   SUB-BASIN A09L
5047          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5048          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
5049          KM     L =  .41  Kb = .048  Adj. Slope =   29.0
5050          BA    .136
5051          LG    0.22    0.28    4.90    0.31      22
5052          UC   0.538   0.426
5053          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5054          UA     100
              *
              *
              * *** STORAGE ROUTING LA09L ***********************************************
              * *** ALTA VISTA RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) **************
              * DDM   ***** Preserved *****

5055          KK   LA09L
5056          DT  LA09LD     8.8
5057          DI       0     100    1000   10000
5058          DQ       0     100    1000   10000
              *
              *
              * *** COMBINE  CA09L ******************************************************
              * *** COMBINE BASIN A09L, RA09N, AND RA09JW   ***********************************
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5059          KK   CA09L
5060          HC       3
              *
              *
              * *** DIVERSION DA09L *****************************************************
              * *** DIVERTED  MAIN (SOUTH), DIVERTED (WEST)  ***************************
              *
              * FUTURE SPLIT: ALL EXISTING FLOW TO THE SOUTH
              *
              * DDM   ***** Preserved *****

5061          KK   DA09L
5062          DT   A09LI
5063          DI       0      10      30      50     100     500    1000    2000
5064          DQ       0      .2      .3      .4      .5      .6      .7      .8
              *
```

```
                *
                * *** ROUTE RA09LS ***********************************************************
                *
                * ROUTE RA09LS IS 2648 FT WITH A SLOPE OF .0019
                * CROSS SECTION IS A CHANNEL (MEASURED)
                *
                * *** ROUTE FLOW TO CA99W FROM CA09L  *************************
                * DDM   ***** Preserved *****

5065            KK  RA09LS
5066            RS      12    FLOW       0
5067            RC    0.05     .04     .05    2648  0.0019
5068            RX       0     250     300     315     330     380     400     400
5069            RY       6       4       3       0       3       4       5      10
                *
                * *** DIVERSION RECOVER DRA09I  ***********************************************
                * *** RECOVER DIVERTED FLOW FROM CA09I ****************************************
                * DDM   ***** Preserved *****

5070            KK  DRA09I
5071            DR   A09II
                *
                * *** ROUTE RA09IW  ***********************************************************
                *
                * ROUTE RA09IW IS 1283 FT WITH A SLOPE OF .0078
                * CROSS SECTION IS ROSE GARDEN LANE CHANNEL (MEASURED)
                *
                * *** ROUTE FLOW TO CX10 FROM CA09I  **************************
                * DDM   ***** Preserved *****

5072            KK  RA09IW
5073            RS       2    FLOW       0
5074            RC    0.04    0.03    0.04    1283   .0078
5075            RX       0       1      11      21      31      61     101     141
5076            RY      16       8       8       2       8       8       4       8
                *
                * *** COMBINE  CX10 ***********************************************************
                * *** COMBINE  RA09IW AND RA09LS **********************************************
                * DDM   ***** Preserved *****
                                              HEC-1 INPUT                                          PAGE206

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5077            KK    CX10
5078            HC       2    1.34
                *
                * *** DIVERSION DX10 **********************************************************
                * *** DIVERTED  MAIN (SOUTH RETENTION,) DIVERTED (WEST)  **********************
                *
                * MOST OF THE FLOW WILL CONTINUE WEST IN THE CHANNEL.
                * THE CHANNEL'S DOWNSTREAM CAPACITY IS 617 CFS (VENTANA LAKES REPORT)
                *
                * DDM   ***** Preserved *****

5079            KK    DX10
5080            DT    X10I
5081            DI       0       1     100     300     500     650     820    1000    1500    2000
5082            DQ       0      .9       9      29     499     649     819     975    1420    1860
                *
                * DDM   ***** Preserved *****

5083            KK    A09D   BASIN
5084            KM   SUB-BASIN A09D
5085            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5086            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
5087            KM     L =  .50  Kb = .047  Adj. Slope =   28.0
5088            BA    .254
5089            LG    0.22    0.20    6.60    0.16      31
5090            UC   0.292   0.107
5091            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5092            UA     100
                *
                *
                * *** STORAGE ROUTING LA09D ***************************************************
```

```
                 * *** VENTANA LAKES RESIDENTIAL DEVELOPMENT (ACCOUNTED) ******************
                 * DDM   ***** Preserved *****

5093             KK   LA09D
5094             DT  LA09DD    16.3
5095             DI       0     100    1000   10000
5096             DQ       0     100    1000   10000
                 *
                 * *** COMBINE  CA09D ****************************************************
                 * *** COMBINE BASIN A09D AND DX10  ****************************************
                 * DDM   ***** Preserved *****

5097             KK   CA09D
5098             HC       2
                 *
                 *
                 *
                 * *** RECALL THE DIVERTED FLOW ALONG ROSE GARDEN LANE CHANNEL **************
                 *
1                                          HEC-1 INPUT                                    PAGE20

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5099             KK   DRX10
5100             DR    X10I
                 *
                 * *** ROUTE RX10W  ***********************************************************
                 *
                 * ROUTE RX10W IS 1283 FT WITH A SLOPE OF .0039
                 * CROSS SECTION IS ROSE GARDEN LANE CHANNEL (MEASURED)
                 *
                 * *** ROUTE FLOW TO CX11 FROM CX10  ***************************
                 *

5101             KK   RX10W
5102             RS       2    FLOW       0
5103             RC    0.04    0.03    0.04    1283  0.0039
5104             RX       0       1      11      17      24      30      80     601
5105             RY      16       8       8       2       2       8       8       9
                 *
                 *
                 * *** DIVERSION DX11 ****************************************************
                 * *** DIVERTED  MAIN (SOUTH CHANNEL), DIVERTED (WEST)  *****************
                 *
                 * MOST OF THE FLOW WILL CONTINUE WEST OVERLAND INTO THE AGUA FRIA RIVER.
                 * THE CHANNEL CAPACITY IS 617 CFS 90 DEGREE TURN IN THE CHANNEL
                 * ASSUMED A 50% SPLIT FOR HIGH FLOWS
                 *
                 * DDM   ***** Preserved *****

5106             KK    DX11
5107             DT    X11I
5108             DI       0     100     300     500     650     750    1000    2000
5109             DQ       0      .2      .3      40      80     175     420    1380
                 *
                 * *** ROUTE RX11S  ***********************************************************
                 *
                 * ROUTE RX11S IS 2513 FT WITH A SLOPE OF .004
                 * CROSS SECTION IS 111TH AVE CHANNEL (MEASURED)
                 *
                 * *** ROUTE FLOW TO CA09C* FROM CX11  ***************************
                 *

5110             KK   RX11S
5111             RS       3    FLOW       0
5112             RC    0.04    0.03    0.04    2513   0.004
5113             RX       0       1      11      17      24      30      80     601
5114             RY      16       8       8       2       2       8       8       9
                 *
                 * *** COMBINE RX11S, LA09D, AND RA09EW ************************
                 *
                                           HEC-1 INPUT                                    PAGE20E

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
5115          KK  CA09C*
5116          HC       3    4.46
              *
              * *** ROUTE FLOW TO CA09C ***********************************
              *
              * *** ROUTE RA09C*  ************************************************************
              *
              * ROUTE RA09C* IS 841 FT WITH A SLOPE OF .0083
              * CROSS SECTION IS BEARDSLEY ROAD CHANNEL (MEASURED)
              *
              * *** ROUTE FLOW TO CA09C FROM CA09C*   ***************************
              *

5117          KK  RA09C*
5118          RS       1    FLOW       0
5119          RC    0.04    0.03    0.04     841   .0083
5120          RX       0      51      61      71      81     111     151     651
5121          RY       9       8       0       0       8       9       9      10
              *
              * DDM   ***** Preserved *****

5122          KK    A09C   BASIN
5123          KM   SUB-BASIN A09C
5124          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5125          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
5126          KM     L =  .52  Kb = .059  Adj. Slope =   52.0
5127          BA    .073
5128          LG    0.35    0.32    4.50    0.38       3
5129          UC   0.342   0.296
5130          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
5131          UA     100
              *
              * *** COMBINE  CA09C ***********************************************************
              * *** COMBINE BASIN A09C AND RA09C*   ***********************************
              * DDM   ***** Preserved *****

5132          KK   CA09C
5133          HC       2
              *
              * *** ROUTE RA09C ***************************************************************
              *
              * ROUTE RA09C IS 1978 FT WITH A SLOPE OF .0056
              * CROSS SECTION IS BEARDSLEY CHANNEL (MEASURED)
              *
              * *** ROUTE FLOW TO CA09A FROM CA09C  **************************
              * DDM   ***** Preserved *****

5134          KK   RA09C
5135          KO       3
5136          RS       3    FLOW       0
5137          RC    0.04    0.04    0.04    1978  0.0056
5138          RX       0     100     120     130     150     180     205     705
5139          RY      14       8       0       0       8       8       9      10
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5140          KK    A09B   BASIN
5141          KM   SUB-BASIN A09B
5142          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5143          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
5144          KM     L =  .25  Kb = .034  Adj. Slope =   80.0
5145          BA    .041
5146          LG    0.12    0.25    4.10    0.60      56
5147          UC   0.138   0.084
5148          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5149          UA     100
              *
              *
              * *** ROUTE RA09B ***************************************************************
              *
```

```
                 * ROUTE RA09B IS 2497 FT WITH A SLOPE OF .0012
                 * CROSS SECTION IS A SMALL NATURAL CHANNEL
                 *
                 * *** ROUTE FLOW TO CA09A FROM CA09B  **************************
                 * DDM   ***** Preserved *****

5150             KK   RA09B
5151             RS      22    FLOW       0
5152             RC    0.05     .06     .05    2497   .0012
5153             RX       0     350     450     480     482     510     610     910
5154             RY       7       6       5       1       0       5       6       7
                 *
                 * DDM   ***** Preserved *****

5155             KK    A09A   BASIN
5156             KM   SUB-BASIN A09A
5157             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5158             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
5159             KM     L =  .16  Kb = .071  Adj. Slope =   56.0
5160             BA    .084
5161             LG    0.33    0.16    3.74    0.76      23
5162             UC   0.683   0.598
5163             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5164             UA     100
                 *
                 * *** COMBINE  CA09A ***********************************************************
                 * *** Combine  CA09C, A09B, AND A09A ******************************************
                 * DDM   ***** Preserved *****

5165             KK   CA09A
5166             HC       3
                 *
                 * *** DIVERSION DA09AO ***********************************************************
                 * *** DIVERTED  MAIN (WEST) DIVERTED (SOUTH)  **********************
                 *
                 *
                 * THIS FLOW IS DIVERTED. THERE IS TWO 36" CMP THAT CARRIES
                 * FLOW TO THE WEST, AND THE REST FLOWS SOUTH.
                 *
                 *
                 *
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE21(

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5167             KK  DA09AO
5168             DT   A09AI
5169             DI       0      70     140     400     600     800    1000    3000    5000
5170             DQ       0     0.2     0.3     260     460     660     860    2860    4860
                 *
                 *
                 * *** ROUTE RA09AW  ***********************************************************
                 *
                 * ROUTE RA09AW IS 5898 FT WITH A SLOPE OF .0017
                 * CROSS SECTION IS A LARGE NATURAL WASH
                 *
                 * *** ROUTE THE DIVERTED FLOW TO THE WEST AND SOUTH TO CA09 *******************
                 * DDM   ***** Preserved *****

5171             KK  RA09AW
5172             RS      39    FLOW       0
5173             RC    0.05     .06     .05    5898  0.0017
5174             RX       0      50     250     310     360     420     620     720
5175             RY      10       8       6       0       0       6       8      10
                 *
                 * DDM   ***** Preserved *****

5176             KK    A99T   BASIN
5177             KM   SUB-BASIN A99T
5178             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5179             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
5180             KM     L =  .07  Kb = .062  Adj. Slope =   29.0
5181             BA    .030
```

```
5182          LG    0.34    0.34    2.79    1.13       3
5183          UC   0.154   0.041
5184          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
5185          UA     100
              *
              *
              * *** STORAGE ROUTING LA99T ***********************************************
              * *** GRAVEL PIT STORAGE (ACCOUNTED) ***************************************
              * DDM   ***** Preserved *****

5186          KK   LA99T
5187          DT  LA99TD     0.8
5188          DI       0     100    1000   10000
5189          DQ       0     100    1000   10000
              *
              *
              *
              * *** ROUTE RA99T  ************************************************************
              *
              * ROUTE RA99T IS 886 FT WITH A SLOPE OF .0023
              * CROSS SECTION IS A MEDIUM NATURAL WASH
              *
              * *** ROUTE FLOW TO CA09 FROM CA99T   **************************
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE21

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5190          KK   RA99T
5191          RS       7    FLOW       0
5192          RC    0.05     .06     .05     886  0.0023
5193          RX       0      50     250     350     360     420     620     720
5194          RY      10       8       6       2       0       6       8      10
              *
              * DDM   ***** Preserved *****

5195          KK     A09   BASIN
5196          KM   SUB-BASIN A09
5197          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5198          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
5199          KM     L =  .07  Kb = .062  Adj. Slope =   29.0
5200          BA    .176
5201          LG    0.31    0.34    3.58    0.61       3
5202          UC   0.404   0.161
5203          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
5204          UA     100
              *
              * COMINE RA99T, CA09, AND RA09AW
              *
              * DDM   ***** Preserved *****

5205          KK    CA09
5206          HC       3
              *
              *
              * ((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
              * )))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))
              * ((((((                                                          ))))))))
              * ((((((                SUN CITY NORTH BEGINS BELOW               ))))))))
              * ((((((                                                          ))))))))
              * ((((((                                                          ))))))))
              * ((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
              * )))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))
              *
              *
              *
              *
              *
              * *** RECALL THE FLOW THAT IS DIVERTED AT 99TH AVE AND BEARDSLEY RD*****
              *
              *
              * DDM   ***** Preserved *****

5207          KK  DRA09F
```

```
5208          DR   A09FI
              *
              * *** ROUTE RA09FS  ***************************************************
              *
              * ROUTE RA09FS IS 688 FT WITH A SLOPE OF .0058
              * CROSS SECTION IS 99TH AVENUE
              *
              * *** ROUTE THE RECOVERED FLOW THROUGH BASIN S30D TO CS30D *************
              *
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE21

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5209          KK  RA09FS
5210          RS       2    FLOW       0
5211          RC    0.04    0.03    0.04     688   .0058
5212          RX       0       1      41      94     114     134     239     240
5213          RY      12       4       3       3       0       3       4      12
              *
              * DDM   ***** Preserved *****

5214          KK    S30D   BASIN
5215          KM   SUB-BASIN S30D
5216          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5217          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
5218          KM     L =  .46  Kb = .054  Adj. Slope =   15.0
5219          BA    .131
5220          LG    0.25    0.17    6.80    0.15      34
5221          UC   0.450   0.261
5222          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5223          UA     100
              *
              *
              * *** COMBINE BASIN S30D AND RA09S ***********************************
              *
              * DDM   ***** Preserved *****

5224          KK   CS30D
5225          HC       2    2.85
              *
              * *** ROUTE RS30D  ****************************************************
              *
              * ROUTE RS30D IS 6176 FT WITH A SLOPE OF .0023
              * CROSS SECTION IS 99TH AVENUE
              *
              * *** ROUTE S30D THROUGH S30C *****************************************
              *
              * DDM   ***** Preserved *****

5226          KK   RS30D
5227          RS       1    FLOW       0
5228          RC    .022    .022    .022    6176  0.0023
5229          RX       0       1      85      95     109     134     239     240
5230          RY      12       6       5       0       0       5       6      12
              *
              * DDM   ***** Preserved *****

5231          KK    S30B   BASIN
5232          KM   SUB-BASIN S30B
5233          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5234          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
5235          KM     L = 1.63  Kb = .039  Adj. Slope =   21.0
5236          BA    .398
5237          LG    0.22    0.25    5.80    0.25      29
5238          UC   0.837   0.759
5239          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5240          UA     100
              * DDM   ***** Preserved *****
                                           HEC-1 INPUT                                                    PAGE21

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
5241          KK    S30C   BASIN
5242          KM   SUB-BASIN S30C
5243          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5244          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .994
5245          KM     L = 1.49  Kb = .043  Adj. Slope =   24.0
5246          BA    .455
5247          LG    0.23    0.15    7.30    0.13      41
5248          UC   0.738   0.569
5249          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5250          UA     100
              *
              * *** COMBINE BASIN S30C, S30B, AND RS30D ******************************
              *
              * DDM   ***** Preserved *****

5251          KK   CS30B
5252          HC       3
              *
              * *** DIVERSION DS30BO ********************************************************
              * *** DIVERTED  MAIN (WEST) DIVERTED (SOUTH)  ***********************
              *
              * THERE IS A DIVERSION AT THIS LOCATION. THE DEL WEBB CHANNEL CAN CARRY
              * 550 CFS, THE REST OF THE FLOW OVERFLOWS TO THE SOUTH.
              *
              * DDM   ***** Preserved *****

5253          KK  DS30BO
5254          DT  DS30BI
5255          DI       1     250     550     750    1000    1500    1750    2000
5256          DQ      .1      .2      .3     200     450     950    1200    1450
              *
              *
              * *** ROUTE RS30BW  ****************************************************
              *
              * ROUTE RS30BW IS 5060 FT WITH A SLOPE OF .0008
              * CROSS SECTION IS DEL WEBB BLVD
              *
              * *** ROUTED S30BO THROUGH S30A ****************************************
              *
              * DDM   ***** Preserved *****

5257          KK  RS30BW
5258          RS      11    FLOW       0
5259          RC    0.03    0.02    0.03    5060  0.0008
5260          RX       0       1     100     125     130     155     239     240
5261          RY      12       5       4       0       0       4       5      12
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5262          KK    S30A   BASIN
5263          KM   SUB-BASIN S30A
5264          KM   6-HOUR RAINFALL, PATTERN NO. 1.03 WAS USED TO FIND TC & R FOR THIS BASIN
5265          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .993
5266          KM     L = 1.43  Kb = .036  Adj. Slope =   13.0
5267          BA    .531
5268          LG    0.22    0.21    6.40    0.21      28
5269          UC   0.808   0.529
5270          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5271          UA     100
              *
              * *** COMBINE BASIN S30A AND RS30B ****************************************
              *
              * DDM   ***** Preserved *****

5272          KK   CS30A
5273          HC       2
              *
              * *** DIVERSION DS30AO ************************************************
              * *** DIVERTED  MAIN (WEST) DIVERTED (SOUTH)  *************************
              *
```

```
                 * THERE IS A DIVERSION AT THIS LOCATION. THE DEL WEBB CHANNEL CAN CARRY
                 * 550 CFS, THE REST OF THE FLOW OVERFLOWS TO THE SOUTH.
                 *
                 * DDM   ***** Preserved *****

5274             KK  DS30AO
5275             DT  DS30AI
5276             DI       1     250     550     750    1000    1500    1750    2000
5277             DQ      .1      .2      .3     200     450     950    1200    1450
                 *
                 * *** ROUTE RS30AW  ***************************************************
                 *
                 * ROUTE RS30AW IS 4919 FT WITH A SLOPE OF .0043
                 * CROSS SECTION IS DEL WEBB BLVD
                 *
                 * *** ROUTE FLOW FROM CS30A TO CS30 ************************************
                 *
                 * DDM   ***** Preserved *****

5278             KK  RS30AW
5279             RS       5    FLOW       0
5280             RC    0.03    0.02    0.03    4919  0.0043
5281             RX       0       1     110     125     140     155     160     161
5282             RY      15       7       7       0       0       7       7      15
                 *
                 *
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE21!

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5283             KK     S30   BASIN
5284             KM   SUB-BASIN S30
5285             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5286             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
5287             KM     L = 1.12  Kb = .040  Adj. Slope =   27.0
5288             BA    .321
5289             LG    0.22    0.26    4.55    0.43      27
5290             UC   0.596   0.436
5291             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5292             UA     100
                 *
                 * *** COMBINE BASIN S30 AND RS30A ***************************************
                 *
                 * DDM   ***** Preserved *****

5293             KK    CS30
5294             HC       2
                 *
                 * *** ROUTE RS30  *****************************************************
                 *
                 * ROUTE RS30 IS 691 FT WITH A SLOPE OF .0058
                 * CROSS SECTION IS A CHANNEL ALONG BELL RD (MEASURED)
                 *
                 * *** ROUTE FLOW FROM CS30 TO CA07B ************************************
                 *
                 * DDM   ***** Preserved *****

5295             KK    RS30
5296             RS       1    FLOW       0
5297             RC    0.03    0.02    0.03     691  0.0058
5298             RX       0      26     136     197     212     227     242     742
5299             RY       9       8       8       7       0       0       7       9
                 *
                 * DDM   ***** Preserved *****

5300             KK    A07G   BASIN
5301             KM   SUB-BASIN A07G
5302             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5303             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
5304             KM     L =  .70  Kb = .033  Adj. Slope =   43.0
5305             BA    .258
5306             LG    0.14    0.25    7.60    0.09      22
5307             UC   0.300   0.158
```

```
5308          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5309          UA     100
              *
              *
              * *** STORAGE ROUTING LA07G ***********************************************
              * *** VENTANA LAKES RESIDENTIAL DEVELOPMENT (ACCOUNTED) ******************
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE21

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5310          KK   LA07G
5311          DT  LA07GD    14.9
5312          DI       0     100    1000   10000
5313          DQ       0     100    1000   10000
              *
              *
              * *** ROUTE RA07G  ****************************************************
              *
              * ROUTE RA07G IS 2439 FT WITH A SLOPE OF .0012
              * CROSS SECTION IS 111TH AVE (MEASURED)
              *
              * *** ROUTE FLOW FROM CA07G TO CA07E ***********************************
              *
              * DDM   ***** Preserved *****

5314          KK   RA07G
5315          RS      14    FLOW       0
5316          RC    0.04     .02    0.04    2439  0.0012
5317          RX       0       1      26      41      71      86     126     576
5318          RY      12       7       5       1       1       5       6       7
              *
              * DDM   ***** Preserved *****

5319          KK    A07F   BASIN
5320          KM   SUB-BASIN A07F
5321          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5322          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
5323          KM     L = 1.16  Kb = .044  Adj. Slope =   17.0
5324          BA    .233
5325          LG    0.23    0.25    4.90    0.37      33
5326          UC   0.742   0.686
5327          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5328          UA     100
              *
              * *** ROUTE RA07F  ****************************************************
              *
              * ROUTE RA07F IS 2619 FT WITH A SLOPE OF .0042
              * CROSS SECTION IS CHANNEL ALONG UNION HILLS RD (MEASURED)
              *
              * *** ROUTE FLOW FROM CA07F TO CA07E ***********************************
              *
              * DDM   ***** Preserved *****

5329          KK   RA07F
5330          RS       4    FLOW       0
5331          RC    0.03    0.02    0.03    2619  0.0042
5332          RX       0       1      13      23      53      83     108     109
5333          RY      14       6       0       0       6       6       7      15
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE21

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5334          KK    A07E   BASIN
5335          KM   SUB-BASIN A07E
5336          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5337          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
5338          KM     L =  .70  Kb = .047  Adj. Slope =   37.0
5339          BA    .227
5340          LG    0.23    0.16    7.30    0.13      47
5341          UC   0.387   0.226
```

```
5342          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5343          UA     100
              *
              * *** COMBINE BASIN A07E, RA07F, AND RA07G  ****************************
              *
              * DDM   ***** Preserved *****

5344          KK   CA07E
5345          HC       3
              *
              * *** ROUTE RA07E  ****************************************************
              *
              * ROUTE RA07E IS 1771 FT WITH A SLOPE OF .004
              * CROSS SECTION IS CHANNEL ALONG UNION HILLS RD (MEASURED)
              *
              * *** ROUTE FLOW FROM CA07E TO CA07C ***********************************
              *
              * DDM   ***** Preserved *****

5346          KK   RA07E
5347          RS       2    FLOW       0
5348          RC    0.03    0.03    0.03    1771   0.004
5349          RX       0     100     112     122     134     154     189     689
5350          RY       8       6       0       0       6       7       7       9
              *
              * DDM   ***** Preserved *****

5351          KK    A07C   BASIN
5352          KM   SUB-BASIN A07C
5353          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5354          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
5355          KM     L =  .65  Kb = .054  Adj. Slope =   37.0
5356          BA    .175
5357          LG    0.35    0.33    4.90    0.30       1
5358          UC   0.429   0.277
5359          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
5360          UA     100
              *
              * *** COMBINE BASIN A07C AND RA07E ************************************
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5361          KK   CA07C
5362          HC       2
              *
              * *** ROUTE RA07C  ****************************************************
              *
              * ROUTE RA07C IS 1051 FT WITH A SLOPE OF .0067
              * CROSS SECTION IS CHANNEL ALONG UNION HILLS RD (MEASURED)
              *
              * *** ROUTE FLOW FROM CA07C TO CA07D ***********************************
              *
              * DDM   ***** Preserved *****

5363          KK   RA07C
5364          RS       1    FLOW       0
5365          RC    0.03    0.03    0.03    1051  0.0067
5366          RX       0      50      62      72      84     104     139     640
5367          RY       9       6       0       0       6       7       7       9
              *
              * DDM   ***** Preserved *****

5368          KK    A07H   BASIN
5369          KM   SUB-BASIN A07H
5370          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5371          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
5372          KM     L =  .30  Kb = .056  Adj. Slope =   67.0
5373          BA    .093
5374          LG    0.28    0.23    4.70    0.39      24
5375          UC   0.213   0.098
5376          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
```

```
5377          UA     100
              *
              * *** ROUTE RA07H  ****************************************************
              *
              * ROUTE RA07H IS 2386 FT WITH A SLOPE OF .0461
              * CROSS SECTION IS THE FARM FIELDS IN THE AGUA FRIA RIVER (MEASURED)
              *
              * *** ROUTE FLOW FROM CA07H TO CA07D ***********************************
              *
              * DDM   ***** Preserved *****

5378          KK   RA07H
5379          RS       9    FLOW       0
5380          RC    0.03    0.03    0.03    2386  0.0461
5381          RX       0      14     125     250     500     800    1000    1014
5382          RY       7       0       0       0       0       0       0       7
              *
              * *** RECALL THE DIVERTED FLOW FROM CA09A  ****************************
              *   THE OVERFLOW FROM 115TH AVENUE SOUTH
              *
1                                          HEC-1 INPUT                                                    PAGE21

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5383          KK   DA09AX
5384          DR   A09AI
              *
              * *** ROUTE RA09AS  ****************************************************
              *
              * ROUTE RA09AS IS 2658 FT WITH A SLOPE OF .003
              * CROSS SECTION IS 115TH AVE (MEASURED)
              *
              * *** ROUTE FLOW TO CA08B ***********************************************
              *

5385          KK  RA09AS
5386          RS       2    FLOW       0
5387          RC    0.04    0.03    0.04    2658    .003
5388          RX       0     100     125     150     170     195     220     720
5389          RY       5       4       2       0       0       2       4       6
              *
              *
              * DDM   ***** Preserved *****

5390          KK    A08B   BASIN
5391          KM   SUB-BASIN A08B
5392          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5393          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
5394          KM     L =  .44  Kb = .050  Adj. Slope =   18.0
5395          BA    .099
5396          LG    0.25    0.29    3.74    0.59      16
5397          UC   0.458   0.301
5398          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5399          UA     100
              *
              * *** COMBINE BASIN A08B AND RA09AS ************************************
              *
              *

5400          KK   CA08B
5401          HC       2    4.75
              *
              * *** ROUTE RA08B  ******************************************************
              *
              * ROUTE RA08B IS 2925 FT WITH A SLOPE OF .001
              * CROSS SECTION IS 115TH AVE (MEASURED)
              *
              * *** ROUTE FLOW FROM CA08B TO CA07D ************************************
              *
              * DDM   ***** Preserved *****

5402          KK   RA08B
5403          RS       9    FLOW       0
5404          RC    0.03    0.03    0.03    2925   0.001
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5405          RX       0      50     100     150     200     250     300     500
5406          RY       7       6       5       5       0       0       5       6
              *
              * DDM   ***** Preserved *****
                                        HEC-1 INPUT                                                    PAGE22

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5407          KK    A07D   BASIN
5408          KM   SUB-BASIN A07D
5409          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5410          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
5411          KM     L = 1.08  Kb = .093  Adj. Slope =   20.0
5412          BA    .229
5413          LG    0.49    0.02    4.10    0.67       1
5414          UC   1.229   1.146
5415          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5416          UA     100
              *
              * *** COMBINE BASIN A07D, RA08B, RA07H, AND RA07C *********************
              *
              * DDM   ***** Preserved *****

5417          KK   CA07D
5418          HC       4
              *
              * *** ROUTE RA07D  ****************************************************
              *
              * ROUTE RA07D IS 4828 FT WITH A SLOPE OF .0017
              * CROSS SECTION IS A CHANNEL AND 115TH AVE (MEASURED)
              *
              * *** ROUTE FLOW FROM CA07D TO CA07B **********************************
              *
              * DDM   ***** Preserved *****

5419          KK   RA07D
5420          RS       5    FLOW       0
5421          RC    0.03    0.03    0.03    4828  0.0017
5422          RX       0     100     112     147     159     179     214     580
5423          RY       8       6       0       0       6       7       7       9
              *
              *
              * DDM   ***** Preserved *****

5424          KK    A07B   BASIN
5425          KM   SUB-BASIN A07B
5426          KM   6-HOUR RAINFALL, PATTERN NO. 1.15 WAS USED TO FIND TC & R FOR THIS BASIN
5427          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .992
5428          KM     L = 1.58  Kb = .030  Adj. Slope =   41.0
5429          BA    .649
5430          LG    0.16    0.31    4.60    0.34      18
5431          UC   0.533   0.339
5432          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5433          UA     100
              *
              *
              * *** STORAGE ROUTING LA07B ******************************************
              * *** CANYON RIDGE WEST RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
              * DDM   ***** Preserved *****
1                                       HEC-1 INPUT                                                    PAGE221

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5434          KK   LA07B
5435          DT  LA07BD    19.2
5436          DI       0     100    1000   10000
5437          DQ       0     100    1000   10000
              *
              *
              * *** COMBINE LA07B, RA07D, AND RS30  *********************************
              *
              * DDM   ***** Preserved *****
```

```
5438          KK   CA07B
5439          KO                                    21
5440          HC       3
              *
              * *** ROUTE RA07B  ****************************************************
              *
              * ROUTE RA07B IS 2990 FT WITH A SLOPE OF .0057
              * CROSS SECTION IS A MANMADE CHANNEL  (MEASURED)
              *
              * *** ROUTE FLOW FROM CA07B TO CA07A **********************************
              *
              * DDM   ***** Preserved *****

5441          KK   RA07B
5442          KO       3                            21
5443          RS       3    FLOW       0
5444          RC    0.03     .02    0.03    2990   .0057
5445          RX       0      76     136     197     222     247     262     387
5446          RY      10       9       8       7       0       0       7       9
              *
              * DDM   ***** Preserved *****

5447          KK    A06A   BASIN
5448          KM   SUB-BASIN A06A
5449          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5450          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
5451          KM     L =  .73  Kb = .038  Adj. Slope =   70.0
5452          BA    .279
5453          LG    0.21    0.30    4.70    0.34      19
5454          UC   0.375   0.239
5455          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5456          UA     100
              *
              *
              * *** COMBINE BASIN A06A AND RA07B *********************
              *
              * DDM   ***** Preserved *****

5457          KK   CA06A
5458          HC       2
              *
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5459          KK    A07A   BASIN
5460          KM   SUB-BASIN A07A
5461          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5462          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
5463          KM     L =  .88  Kb = .045  Adj. Slope =   18.0
5464          BA    .124
5465          LG    0.21    0.30    3.92    0.51      16
5466          UC   0.688   0.725
5467          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5468          UA     100
              *
              *
              * *** ROUTE RA07A  ****************************************************
              *
              * ROUTE RA07A IS 1095 FT WITH A SLOPE OF .0037
              * CROSS SECTION IS A CHANNEL AND BELL RD (MEASURED)
              *
              * *** ROUTE FLOW FROM CA07A TO CA07 ***********************************
              *
              *
              * DDM   ***** Preserved *****

5469          KK   RA07A
5470          RS       2    FLOW       0
5471          RC    0.03    0.03    0.03    1095  0.0037
5472          RX       0      50      62      72      84     104     204     704
5473          RY       7       6       0       0       6       7       9      10
```

```
                 *
                 * DDM   ***** Preserved *****

5474             KK     A07   BASIN
5475             KM   SUB-BASIN A07
5476             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5477             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
5478             KM     L =  .15  Kb = .054  Adj. Slope =   53.0
5479             BA    .118
5480             LG    0.33    0.33    3.21    0.83       6
5481             UC   0.167   0.038
5482             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
5483             UA     100
                 *
                 * *** COMBINE BASIN A07 AND RA07A  ************************************
                 *
                 * DDM   ***** Preserved *****

5484             KK    CA07
5485             HC       2
                 *
                 * *** ROUTE RA07  ****************************************************
                 *
                 * ROUTE RA07 IS 3464 FT WITH A SLOPE OF .0061
                 * CROSS SECTION IS THE AGUA FRIA RIVER (MEASURED)
                 *
                 * *** ROUTE FLOW FROM CA07 TO CA06 ***********************************
                 *
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE22:

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5486             KK    RA07
5487             KO       3
5488             RS       3    FLOW       0
5489             RC    0.03    0.03    0.03    3464  0.0061
5490             RX       0     100     200     250     300     350     500    1000
5491             RY      12       8       6       0       0       6       8      12
                 *
                 * DDM   ***** Preserved *****

5492             KK     A06   BASIN
5493             KM   SUB-BASIN A06
5494             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5495             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
5496             KM     L =  .38  Kb = .049  Adj. Slope =   24.0
5497             BA    .277
5498             LG    0.35    0.35    3.58    0.61       0
5499             UC   0.346   0.109
5500             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
5501             UA     100
                 *
                 * *** COMBINE BASIN A06 AND RA07 ******************************
                 *
                 * DDM   ***** Preserved *****

5502             KK    CA06
5503             HC       3
                 *
                 * *** ROUTE RA06  ****************************************************
                 *
                 * ROUTE RA06 IS 2650 FT WITH A SLOPE OF .0053
                 * CROSS SECTION IS THE AGUA FRIA RIVER (MEASURED)
                 *
                 * *** ROUTE FLOW FROM CA06 TO CA99Q ***********************************
                 *
                 * DDM   ***** Preserved *****

5504             KK    RA06
5505             RS       6    FLOW       0
5506             RC    0.03    0.03    0.03    2650  0.0053
5507             RX       0     100     200     250     750     800     900    1000
5508             RY       9       8       6       0       0       6       8       9
```

```
                 *
                 * DDM   ***** Preserved *****

5509             KK    A99Q   BASIN
5510             KM   SUB-BASIN A99Q
5511             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5512             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
5513             KM     L =  .06  Kb = .054  Adj. Slope =   83.0
5514             BA    .118
5515             LG    0.35    0.35    3.67    0.58       0
5516             UC   0.087   0.009
5517             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
5518             UA     100
                 *
                 * *** COMBINE BASIN A99Q AND RA06  ************************************
                 *
                 * DDM   ***** Preserved *****
1                                                HEC-1 INPUT                                                PAGE22

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5519             KK   CA99Q
5520             HC       2
                 *
                 * *** COMBINE HYDROGRAPHS OF CA99Q AND CA09 TO PREVENT ERROR ***********
                 *
                 * DDM   ***** Preserved *****

5521             KK  DUMMY1
5522             HC       3
                 *
                 * THE DUMMY HYDROGRAPH COMBINATION WILL BE ENTIRELY DIVERTED
                 * OUT OF THE MODEL AT THIS POINT.  THE DIVERSION ROUTE THAT WILL
                 * CARRY NO FLOW WILL BE COMBINED WITH RN06 AND S10 TO PREVENT ERROR.
                 *
                 * DDM   ***** Preserved *****

5523             KK   DUMMY
5524             DT  DUMMYO
5525             DI     100     200     500    1000    2000    5000   10000   20000
5526             DQ     100     200     500    1000    2000    5000   10000   20000
                 *
                 * THE 'EMPTY' DIVERSION WILL NOW BE ROUTED
                 *
                 * DDM   ***** Preserved *****

5527             KK   EMPTY
5528             RS       1    FLOW       0
5529             RC    0.03    0.03    0.03    5000  0.0015
5530             RX       0     100     200     250     750     800     900    1000
5531             RY       9       8       6       0       0       6       8       9
                 *
                 *
                 *
                 * ((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
                 * )))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))
                 * ((((((                                                          ))))))))
                 * ((((((                 SUN CITY SOUTH BEGINS BELOW              ))))))))
                 * ((((((                                                          ))))))))
                 * ((((((                                                          ))))))))
                 * ((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
                 * )))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))
                 *
                 *
                 *
                 * DDM   ***** Preserved *****

5532             KK    S10V   BASIN
5533             KM   SUB-BASIN S10V
5534             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5535             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
5536             KM     L =  .79  Kb = .051  Adj. Slope =   22.0
5537             BA    .197
5538             LG    0.25    0.25    4.90    0.34      40
```

```
5539          UC   0.538   0.389

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5540          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5541          UA     100
              *
              *
              * *** ROUTE RS10V  ****************************************************
              *
              * ROUTE RS10V IS 3095 FT WITH A SLOPE OF .0019
              * CROSS SECTION IS SMALL WASH (MEASURED)
              *
              * *** ROUTE FLOW FROM CS10V TO CS10U ***********************************
              *
              * DDM   ***** Preserved *****

5542          KK   RS10V
5543          RS       6    FLOW       0
5544          RC    0.03    0.03    0.03    3095  0.0019
5545          RX       0     100     340     360     390     410     620     720
5546          RY      10       8       6       0       0       6       8      10
              *
              * DDM   ***** Preserved *****

5547          KK    S10U   BASIN
5548          KM   SUB-BASIN S10U
5549          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5550          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
5551          KM     L =  .69  Kb = .042  Adj. Slope =   17.0
5552          BA    .107
5553          LG    0.23    0.25    4.90    0.39      22
5554          UC   0.517   0.473
5555          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5556          UA     100
              *
              * *** COMBINE BASIN S10U AND RS10V  ************************************
              *
              * DDM   ***** Preserved *****

5557          KK   CS10U
5558          HC       2
              *
              * *** ROUTE RS10U  ****************************************************
              *
              * ROUTE RS10U IS 2399 FT WITH A SLOPE OF .0025
              * CROSS SECTION IS RURAL ROAD
              *
              * *** ROUTE FLOW FROM CS10U TO CS10T ***********************************
              *
              * DDM   ***** Preserved *****

5559          KK   RS10U
5560          RS       4    FLOW       0
5561          RC    0.03    0.02    0.03    2399  0.0025
5562          RX       0       1      25      26      61      62      92      93
5563          RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5564          KK    S10T   BASIN
5565          KM   SUB-BASIN S10T
5566          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5567          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
5568          KM     L = 1.12  Kb = .043  Adj. Slope =   21.0
5569          BA    .340
5570          LG    0.23    0.25    5.40    0.29      37
5571          UC   0.629   0.448
5572          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5573          UA     100
```

```
                *
                * *** COMBINE BASIN S10T AND RS10U  ************************************
                *
                * DDM   ***** Preserved *****

5574            KK   CS10T
5575            HC       2
                *
                * *** ROUTE RS10T   ****************************************************
                *
                * ROUTE RS10T IS 1703 FT WITH A SLOPE OF .0018
                * CROSS SECTION IS A MAN MADE CHANNEL (MEASURED)
                *
                * *** ROUTE FLOW FROM CS10T TO CS10S ***********************************
                *
                * DDM   ***** Preserved *****

5576            KK   RS10T
5577            RS       2    FLOW       0
5578            RC    0.03    0.02    0.03    1703  0.0018
5579            RX       0      35      40      50      60      70      75      76
5580            RY       7       5       5       0       0       5       5      13
                *
                * *** RECALL THE DIVERTED PORTION OF CS30C *****************************
                *
                * DDM   ***** Preserved *****

5581            KK  DS30BX
5582            DR  DS30BI
                *
                * *** ROUTE RS30BS   ***************************************************
                *
                * ROUTE RS30BS IS 3286 FT WITH A SLOPE OF .0018
                * CROSS SECTION IS 99TH AVE
                *
                * *** ROUTE FLOW FROM CS30B TO CS10S ***********************************
                *
                * DDM   ***** Preserved *****
                                          HEC-1 INPUT                                    PAGE22

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5583            KK  RS30BS
5584            RS      13    FLOW       0
5585            RC    0.03    0.02    0.03    3286  0.0018
5586            RX       0      20      30      31     176     177     197     237
5587            RY      10      .5     .25       0       0     .25     0.5      10
                *
                *
                * DDM   ***** Preserved *****

5588            KK    S10S   BASIN
5589            KM   SUB-BASIN S10S
5590            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5591            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .994
5592            KM     L =  .88  Kb = .041  Adj. Slope =   16.0
5593            BA    .485
5594            LG    0.21    0.15    8.00    0.10      50
5595            UC   0.579   0.275
5596            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5597            UA     100
                *
                * *** COMBINE BASIN S10S, RS10T, AND RS30BS  ***************************
                *
                * DDM   ***** Preserved *****

5598            KK   CS10S
5599            HC       3    4.84
                *
                * *** ROUTE RS10S   ****************************************************
                *
                * ROUTE RS10S IS 1434 FT WITH A SLOPE OF .0021
                * CROSS SECTION IS 99TH AVE
                *
```

```
                 * *** ROUTE FLOW FROM CS10S TO CS10Q ***********************************
                 *
                 * DDM   ***** Preserved *****

5600             KK   RS10S
5601             RS       2    FLOW       0
5602             RC    0.03    0.02    0.03    1434  0.0021
5603             RX       0      73     101     106     111     126     154     249
5604             RY       8       5       5       0       0       5       5       8
                 *
                 * DDM   ***** Preserved *****

5605             KK    S10Q   BASIN
5606             KM   SUB-BASIN S10Q
5607             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5608             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
5609             KM     L = 1.01  Kb = .042  Adj. Slope =   17.0
5610             BA    .255
5611             LG    0.20    0.19    6.60    0.18      53
5612             UC   0.637   0.493
5613             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5614             UA     100
                 *
                 * *** COMBINE BASIN S10Q AND RS10S  ***********************************
                 *
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE22.

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5615             KK   CS10Q
5616             HC       2
                 *
                 * *** ROUTE RS10Q   ****************************************************
                 *
                 * ROUTE RS10Q IS 2335 FT WITH A SLOPE OF .0043
                 * CROSS SECTION IS 99TH AVE
                 *
                 * *** ROUTE FLOW FROM CS10Q TO CS10O **********************************
                 *
                 * DDM   ***** Preserved *****

5617             KK   RS10Q
5618             RS       2    FLOW       0
5619             RC    0.03    0.02    0.03    2335  0.0043
5620             RX       0      53     101     106     111     126     154     249
5621             RY       9       5       5       0       0       5       5       9
                 *
                 * *** RECALL THE DIVERTED FLOW FROM BASIN S10R  ************************
                 *
                 * DDM   ***** Preserved *****

5622             KK  DRS10R
5623             DR   S10RI
                 *
                 * *** ROUTE RS10RW   ***************************************************
                 *
                 * ROUTE RS10RW IS 4553 FT WITH A SLOPE OF .0026
                 * CROSS SECTION IS A SUBDIVISION ROAD
                 *
                 * *** ROUTE FLOW FROM CS10R TO CS10O **********************************
                 *
                 * DDM   ***** Preserved *****

5624             KK  RS10RW
5625             RS      24    FLOW       0
5626             RC    0.03    0.02    0.03    4553  0.0026
5627             RX       0       1      25      26      61      62      92      93
5628             RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
                 *
                 *
                 * DDM   ***** Preserved *****

5629             KK    S10O   BASIN
```

```
5630          KM   SUB-BASIN S10O
5631          KM   6-HOUR RAINFALL, PATTERN NO. 1.27 WAS USED TO FIND TC & R FOR THIS BASIN
5632          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
5633          KM     L = 1.29  Kb = .038  Adj. Slope =   17.0
5634          BA    .793
5635          LG    0.23    0.25    5.80    0.24      34
5636          UC   0.733   0.367
5637          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5638          UA     100
              *
              * *** COMBINE BASIN S10O, RS10RW, AND RS10Q  ***************************
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5639          KK   CS10O
5640          HC       3
              *
              * DDM   ***** Preserved *****

5641          KK    S10J   BASIN
5642          KM   SUB-BASIN S10J
5643          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5644          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
5645          KM     L =  .45  Kb = .048  Adj. Slope =   27.0
5646          BA    .077
5647          LG    0.24    0.23    6.20    0.22      29
5648          UC   0.333   0.249
5649          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5650          UA     100
              *
              * *** DIVERSION DS10JO ***********************************************************
              * *** DIVERTED  MAIN (WEST) DIVERTED (SOUTH)  ***********************
              *
              *
              * THIS FLOW IS DIVERTED. SOME FLOWS WEST TO 99TH AVE, AND SOME FLOWS SOUTH
              * DOWN LAKE FOREST DRIVE.
              *
              * DDM   ***** Preserved *****

5651          KK  DS10JO
5652          DT   S10JI
5653          DI       1      45      91     136     182     227     273     318     364     409
5654          DI     455     500
5655          DQ      .1    26.6    53.3    79.9   106.5   133.1   159.8   186.4     213   239.6
5656          DQ   266.3   292.9
              *
              * *** ROUTE RS10JW   ***************************************************
              *
              * ROUTE RS10JW IS 218 FT WITH A SLOPE OF .0092
              * CROSS SECTION IS A RURAL ROAD
              *
              * *** ROUTE FLOW TO CS10KN ******************************************
              *
              * DDM   ***** Preserved *****

5657          KK  RS10JW
5658          RS       1    FLOW       0
5659          RC    0.03    0.02    0.03     218  0.0092
5660          RX       0       1      25      26      61      62      92      93
5661          RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
              *
              * *** COMBINE RS10JW AND RS10O AT CS10KN ******************************
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5662          KK  CS10KN
5663          HC       2
```

```
                 *
                 * *** ROUTE RS10KN   ***************************************************
                 *
                 * ROUTE RS10KN IS 1032 FT WITH A SLOPE OF .0039
                 * CROSS SECTION IS 99TH AVENUE
                 *
                 * *** ROUTE CS10KN TO CSTOKM ******************************************
                 *
                 * DDM   ***** Preserved *****

5664             KK  RS10KN
5665             RS       1     FLOW       0
5666             RC    0.03     0.02    0.03    1032  0.0039
5667             RX       0       73     101     106     111     126     154     249
5668             RY       9        5       5       0       0       5       5       9
                 *
                 *
                 * *** RECALL DIVERTED FLOW FROM BASIN S10J ****************************
                 *
                 * DDM   ***** Preserved *****

5669             KK   S10JX
5670             DR   S10JI
                 *
                 * *** ROUTE RS10JS   ***************************************************
                 *
                 * ROUTE RS10JS IS 1052 FT WITH A SLOPE OF .0038
                 * CROSS SECTION IS A SUBDIVISION ROAD
                 *
                 * *** ROUTE DIVERTED FLOW TO CS10I ************************************
                 *
                 * DDM   ***** Preserved *****

5671             KK  RS10JS
5672             RS       3     FLOW       0
5673             RC    0.03     0.02    0.03    1052  0.0038
5674             RX       0       10      25      26      61      62      92      93
5675             RY    9.25     1.25    0.25       0       0    0.25    1.25    9.25
                 *
                 *
                 *
                 * DDM   ***** Preserved *****

5676             KK    S10I   BASIN
5677             KM   SUB-BASIN S10I
5678             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5679             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
5680             KM     L =  .70  Kb = .045  Adj. Slope =   23.0
5681             BA    .131
5682             LG    0.22    0.25    5.30    0.31      34
5683             UC   0.458   0.372
5684             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
1                                                HEC-1 INPUT                                          PAGE23

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5685             UA     100
                 *
                 * *** COMBINE BASIN S10I AND RS10JS BEFORE THE DIVERSION ***************
                 *
                 * DDM   ***** Preserved *****

5686             KK   CS10I
5687             HC       2    0.13
                 *
                 * *** DIVERSION DS10IO ************************************************
                 * *** DIVERTED  MAIN (WEST) DIVERTED (SOUTH)  *************************
                 *
                 *
                 * THIS FLOW IS DIVERTED. SOME FLOWS WEST TO 99TH AVE, AND SOME FLOWS SOUTH
                 * DOWN LAKE FOREST DRIVE.
                 *
                 *
                 * DDM   ***** Preserved *****
```

```
5688          KK  DS10IO
5689          DT   S10II
5690          DI       1      45      91     136     182     227     273     318     364     409
5691          DI     455     500
5692          DQ      .1    26.6    53.3    79.9   106.5   133.1   159.8   186.4    213.   239.6
5693          DQ   266.3   292.9
              *
              * *** ROUTE RS10IW   ***************************************************
              *
              * ROUTE RS10IW IS 440 FT WITH A SLOPE OF .0045
              * CROSS SECTION IS A SUBDIVISION ROAD
              *
              * *** ROUTE DIVERTED FLOW TO CS10KM ************************************
              *
              *
              * DDM   ***** Preserved *****

5694          KK  RS10IW
5695          RS       1    FLOW       0
5696          RC    0.03    0.02    0.03     440  0.0045
5697          RX       0       1      41      42      82      83     113     114
5698          RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
              *
              * *** COMBINE RS10IW AND CS10KN AND RS10IW ****************************
              *
              * DDM   ***** Preserved *****

5699          KK  CS10KM
5700          HC       2    6.11
              *
              * *** ROUTE RS10KM   ***************************************************
              *
              * ROUTE RS10KM IS 1941 FT WITH A SLOPE OF .0041
              * CROSS SECTION IS 99TH AVENUE
              *
              * *** ROUTE DIVERTED FLOW TO CS10K *************************************
              *
              *
              * DDM   ***** Preserved *****
                                          HEC-1 INPUT                                          PAGE23

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5701          KK  RS10KM
5702          RS       1    FLOW       0
5703          RC    0.03    0.02    0.03    1941  0.0041
5704          RX       0      73     101     106     111     126     154     249
5705          RY      10       6       6       0       0       6       6      10
              *
              *
              * *** RECALL DIVERTED FLOW FROM CS10I **********************************
              *
              * DDM   ***** Preserved *****

5706          KK   S10IX
5707          DR   S10II
              *
              * *** ROUTE RS10IS   ***************************************************
              *
              * ROUTE RS10IS IS 2001 FT WITH A SLOPE OF .005
              * CROSS SECTION IS A SMALL ROAD WITH HOMES ON BOTH SIDES
              *
              * *** ROUTE DIVERTED FLOW TO CS10N *************************************
              *
              *
              * DDM   ***** Preserved *****

5708          KK  RS10IS
5709          RS       5    FLOW       0
5710          RC    0.03    0.02    0.03    2001   0.005
5711          RX       0       1      25      26      66      67      97      98
5712          RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
              *
              *
```

```
                * DDM   ***** Preserved *****

5713            KK    S10N   BASIN
5714            KM   SUB-BASIN S10N
5715            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5716            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
5717            KM     L =  .67  Kb = .053  Adj. Slope =   19.0
5718            BA    .136
5719            LG    0.25    0.25    5.00    0.32      40
5720            UC   0.512   0.398
5721            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5722            UA     100
                *
                * *** COMBINE BASIN S10N AND RS10IS ***********************************
                *
                * DDM   ***** Preserved *****

5723            KK   CS10N
5724            HC       2    0.35
                *
                *
                * *** DIVERSION DS10NO ************************************************
                * *** DIVERTED  MAIN (WEST) DIVERTED (SOUTH)  **************************
                *
                *
                * THIS FLOW IS DIVERTED. 50% FLOWS WEST TO 99TH AVE, AND 50% FLOWS SOUTH
                * DOWN LAKE FOREST DRIVE.
                *
                *
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE23

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5725            KK  DS10NO
5726            DT   S10NI
5727            DI       0       1     100     200     400     800    1600    2000    3000
5728            DQ       0      .5      50     100     200     400     800    1000    1500
                *
                * *** ROUTE RS10NW   ***************************************************
                *
                * ROUTE RS10NW IS 248 FT WITH A SLOPE OF .0081
                * CROSS SECTION IS A SMALL ROAD WITH HOMES ON BOTH SIDES
                *
                * *** ROUTE DIVERTED FLOW TO CS10K ************************************
                *
                *
                * DDM   ***** Preserved *****

5729            KK  RS10NW
5730            RS       1    FLOW       0
5731            RC    0.03    0.02    0.03     248  0.0081
5732            RX       0       1      25      26      66      67      97      98
5733            RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
                *
                * DDM   ***** Preserved *****

5734            KK    S10K   BASIN
5735            KM   SUB-BASIN S10K
5736            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5737            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
5738            KM     L = 1.14  Kb = .045  Adj. Slope =   22.0
5739            BA    .338
5740            LG    0.23    0.21    6.40    0.19      46
5741            UC   0.625   0.453
5742            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5743            UA     100
                *
                * *** COMBINE BASIN S10K, RS10KM, AND RS10NW **************************
                *
                * DDM   ***** Preserved *****

5744            KK   CS10K
5745            HC       3    6.58
```

```
                 *
                 * *** ROUTE RS10K   ***************************************************
                 *
                 * ROUTE RS10K IS 2792 FT WITH A SLOPE OF .0043
                 * CROSS SECTION IS 99TH AVE
                 *
                 * *** ROUTE CS10K TO CS10G THROUGH BASIN S10G  *************************
                 *
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE23

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5746             KK   RS10K
5747             RS       2    FLOW       0
5748             RC    0.03    0.02    0.03    2792  0.0043
5749             RX       0      73     101     106     111     126     154     249
5750             RY      10       6       6       0       0       6       6      10
                 *
                 *
                 * *** RECALL DIVERTED FLOW FROM BASIN S10N  ****************************
                 *
                 * DDM   ***** Preserved *****

5751             KK   S10NX
5752             DR   S10NI
                 *
                 * *** ROUTE RS10NS   ***************************************************
                 *
                 * ROUTE RS10NS IS 3090 FT WITH A SLOPE OF .0039
                 * CROSS SECTION IS A SMALL ROAD WITH HOMES ON BOTH SIDES
                 *
                 * *** ROUTE THIE DIVERTED FLOW TO CS10G ********************************
                 *
                 * DDM   ***** Preserved *****

5753             KK  RS10NS
5754             RS       7    FLOW       0
5755             RC    0.03    0.02    0.03    3090  0.0039
5756             RX       0       1      41      42      92      93     113     114
5757             RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
                 *
                 * DDM   ***** Preserved *****

5758             KK    S10G   BASIN
5759             KM   SUB-BASIN S10G
5760             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5761             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
5762             KM     L =  .59  Kb = .046  Adj. Slope =   27.0
5763             BA    .284
5764             LG    0.24    0.21    6.40    0.19      32
5765             UC   0.454   0.235
5766             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5767             UA     100
                 *
                 * *** COMBINE BASIN S10G, RS10NS, ADN RS10KS ***************************
                 *
                 * DDM   ***** Preserved *****

5768             KK   CS10G
5769             HC       3
                 *
                 * *** ROUTE RS10G   ****************************************************
                 *
                 * ROUTE RS10G IS 2152 FT WITH A SLOPE OF .0028
                 * CROSS SECTION IS 99TH AVENUE
                 *
                 * *** ROUTE CS10G TO CX40  *********************************************
                 *
                 * DDM   ***** Preserved *****
                                           HEC-1 INPUT                                          PAGE23

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
5770          KK   RS10G
5771          RS       2    FLOW       0
5772          RC    0.03    0.02    0.03    2152  0.0028
5773          RX       0      73     101     106     111     126     154     249
5774          RY      11       6       5       0       0       5       6      11
              *
              * *** DIVERSION DX40   ***************************************************
              * *** DIVERTED  MAIN (SOUTH) DIVERTED (EAST)  **************************
              *
              *
              * THIS FLOW IS DIVERTED. MAIN FLOWS SOUTH TO GRAND AVE, AND DIVERTED FLOWS
              * EAST IN A CHANNEL ALONG EMBERWOOD DRIVE.
              *
              *
              * DDM   ***** Preserved *****

5775          KK    DX40
5776          DT    X40I
5777          DI       0       1      85     290     620    1110    1710    2000    2425   10000
5778          DQ       0      .5      31     153     280     432     550     550     550     550
              *
              * *** ROUTE RX40S   ***************************************************
              *
              * ROUTE RX40S IS 1867 FT WITH A SLOPE OF .0021
              * CROSS SECTION IS 99TH AVENUE
              *
              * *** ROUTE CX40 TO CS10D  ******************************************
              *
              * DDM   ***** Preserved *****

5779          KK   RX40S
5780          RS       2    FLOW       0
5781          RC    0.03    0.02    0.03    1867  0.0021
5782          RX       0      73     101     106     111     126     154     249
5783          RY      11       6       5       0       0       5       6      11
              *
              *
              * DDM   ***** Preserved *****

5784          KK    S10D   BASIN
5785          KM   SUB-BASIN S10D
5786          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5787          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .994
5788          KM     L = 1.27  Kb = .042  Adj. Slope =   16.0
5789          BA    .457
5790          LG    0.22    0.22    5.20    0.29      46
5791          UC   0.821   0.562
5792          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5793          UA     100
              *
              * *** COMBINE RS10D AND RS10G  ******************************************
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5794          KK   CS10D
5795          HC       2
              *
              *
              * *** RECALL TEH DIVERTED FLOW FROM DS30A  ****************************
              *

5796          KK   DS30X
5797          DR  DS30AI
              *
              * *** ROUTE RS30AS   ***************************************************
              *
              * ROUTE RS30AS IS 6201 FT WITH A SLOPE OF .004
              * CROSS SECTION IS DEL WEBB BLVD
              *
              * *** ROUTE DIVERSION TO CS10P  *********************************************
```

```
                 *
                 * DDM   ***** Preserved *****

5798             KK  RS30AS
5799             RS      12    FLOW       0
5800             RC    0.03    0.02    0.03    6201   0.004
5801             RX       0       1      20      21     115     116     136     137
5802             RY      10       2       1     .75     .75       1       2      10
                 *
                 *
                 *
                 * DDM   ***** Preserved *****

5803             KK    S10P   BASIN
5804             KM   SUB-BASIN S10P
5805             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5806             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
5807             KM     L = 1.18  Kb = .040  Adj. Slope =   24.0
5808             BA    .329
5809             LG    0.21    0.25    5.00    0.35      42
5810             UC   0.633   0.479
5811             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5812             UA     100
                 *
                 *
                 * *** COMBINE BASIN  S10P AND RS30AS ***********************************
                 *

5813             KK   CS10P
5814             HC       2    4.56
                 *
                 *
                 *
                 * *** ROUTE RS10P   ****************************************************
                 *
                 * ROUTE RS10P IS 8110 FT WITH A SLOPE OF .0031
                 * CROSS SECTION IS A SMALL WASH (MEASURED)
                 *
                 * *** ROUTE CS10P TO CS10E  ********************************************
                 *
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE23

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5815             KK   RS10P
5816             RS      12    FLOW       0
5817             RC    0.03    0.03    0.03    8110  0.0031
5818             RX       0      50     165     180     195     210     310     360
5819             RY       7       6       5       0       0       5       6       7
                 *
                 * DDM   ***** Preserved *****

5820             KK    S10E   BASIN
5821             KM   SUB-BASIN S10E
5822             KM   6-HOUR RAINFALL, PATTERN NO. 1.13 WAS USED TO FIND TC & R FOR THIS BASIN
5823             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .992
5824             KM     L = 2.48  Kb = .037  Adj. Slope =   13.0
5825             BA    .631
5826             LG    0.22    0.21    6.20    0.21      33
5827             UC   1.358   1.397
5828             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5829             UA     100
                 *
                 * *** COMBINE BASIN S10E AND RS10P *************************************
                 *
                 * DDM   ***** Preserved *****

5830             KK   CS10E
5831             HC       2
                 *
                 * *** ROUTE RS10E   ****************************************************
                 *
                 * ROUTE RS10E IS 1822 FT WITH A SLOPE OF .0044
```

```
                 * CROSS SECTION IS 105TH AVE  (MEASURED)
                 *
                 * *** ROUTE CS10E TO CS10E*     ****************************************
                 *
                 * DDM   ***** Preserved *****

5832             KK   RS10E
5833             RS       3    FLOW       0
5834             RC    0.03    0.02    0.03    1822  0.0044
5835             RX       0     100     110     111     151     152     162     262
5836             RY       3     0.5    0.25       0       0    0.25     0.5       3
                 *
                 * DDM   ***** Preserved *****

5837             KK    S10M   BASIN
5838             KM   SUB-BASIN S10M
5839             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5840             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
5841             KM     L =  .95  Kb = .045  Adj. Slope =   28.0
5842             BA    .353
5843             LG    0.24    0.15    8.00    0.10      41
5844             UC   0.475   0.281
5845             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5846             UA     100
                 *
                 * *** ROUTE RS10M   ****************************************************
                 *
                 * ROUTE RS10M IS 5164 FT WITH A SLOPE OF .0031
                 * CROSS SECTION IS DEL WEBB BLVD
                 *
                 * *** ROUTE S10M TO CS10E*     ****************************************
                 *
                 * DDM   ***** Preserved *****
```



```
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5847             KK   RS10M
5848             RS       7    FLOW       0
5849             RC    0.03    0.02    0.03    5164  0.0031
5850             RX       0       1      25      26      76      77     107     108
5851             RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
                 *
                 * *** COMBINE RS10M AND RS10E ****************************************
                 *
                 * DDM   ***** Preserved *****

5852             KK  CS10E*
5853             HC       2
                 *
                 * *** ROUTE RS10E*   ****************************************************
                 *
                 * ROUTE RS10E* IS 1289 FT WITH A SLOPE OF .0016
                 * CROSS SECTION IS THE GRAND AVENUE CHANNEL (MEASURED)
                 *
                 * *** ROUTE CS10E* TO CS10F*     ****************************************
                 *
                 *
                 * DDM   ***** Preserved *****

5854             KK  RS10E*
5855             RS       2    FLOW       0
5856             RC    0.03    0.02    0.03    1289  0.0016
5857             RX       0       1      25      43      78      98     131     221
5858             RY      15       7       0       0      11      11       7       7
                 *
                 *
                 * DDM   ***** Preserved *****

5859             KK    S10F   BASIN
5860             KM   SUB-BASIN S10F
5861             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5862             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
5863             KM     L = 1.23  Kb = .046  Adj. Slope =   16.0
```

```
5864          BA    .334
5865          LG    0.25    0.25    5.70    0.25      33
5866          UC   0.833   0.666
5867          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5868          UA     100
              *
              * *** ROUTE RS10F   ***************************************************
              *
              * ROUTE RS10F IS 2906 FT WITH A SLOPE OF .0041
              * CROSS SECTION IS 103RD AVE (MEASURED)
              *
              * *** ROUTE S10F TO CS10F*     ****************************************
              *
              * DDM   ***** Preserved *****
1                                                HEC-1 INPUT                                                    PAGE23

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5869          KK   RS10F
5870          RS       8    FLOW       0
5871          RC    0.03    0.02    0.03    2906  0.0041
5872          RX       0     250     260     261     301     302     412     672
5873          RY     3.5     0.5    0.25       0       0    0.25     0.5     3.5
              *
              * *** COMBINE RS10F AND RS10E*     ************************************
              *
              * DDM   ***** Preserved *****

5874          KK  CS10F*
5875          HC       2
              *
              * *** ROUTE RS10F*    ************************************************
              *
              * ROUTE RS10F* IS 2976 FT WITH A SLOPE OF .0013
              * CROSS SECTION IS GRAND AVENUE CHANNEL (MEASURED)
              *
              * *** ROUTE CS10F* TO CS10C  ******************************************
              *
              * DDM   ***** Preserved *****

5876          KK  RS10F*
5877          RS       4    FLOW       0
5878          RC    0.03    0.02    0.03    2976  0.0013
5879          RX       0       1      25      43      78      98     131     221
5880          RY      15       7       0       0      11      11       7       7
              *
              *
              *
              * DDM   ***** Preserved *****

5881          KK    S10C   BASIN
5882          KM   SUB-BASIN S10C
5883          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5884          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
5885          KM     L = 1.72  Kb = .035  Adj. Slope =   10.0
5886          BA    .374
5887          LG    0.12    0.17    6.80    0.18      67
5888          UC   1.042   1.047
5889          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5890          UA     100
              *
              * *** COMBINE BASIN S10C, RS10F*, AND BASIN S10D, AND RS10G  ***********
              *
              * DDM   ***** Preserved *****

5891          KK   CS10C
5892          HC       3
              *
              * *** ROUTE RS10C    ***************************************************
              *
              * ROUTE RS10C IS 2665 FT WITH A SLOPE OF .0045
              * CROSS SECTION IS GRAND AVENUE CHANNEL (MEASURED)
              *
              * *** ROUTE CS10C TO CS10  ********************************************
```

```
                  *
                  * DDM   ***** Preserved *****

LINE              ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5893              KK   RS10C
5894              RS       2    FLOW       0
5895              RC    0.03    0.02    0.03    2665  0.0045
5896              RX       0       1      25      43      78      98     131     221
5897              RY      15       7       0       0      11      11       7       7
                  *
                  *
                  *
                  * *** RECALL THE DIVERTED FLOW FROM DX40  ****************************
                  *

5898              KK   DRX40
5899              DR    X40I
                  *
                  * *** ROUTE RX40E    ************************************************
                  *
                  * ROUTE RX40E IS 1961 FT WITH A SLOPE OF .0010
                  * CROSS SECTION IS GRAND AVENUE CHANNEL (MEASURED)
                  *
                  * *** ROUTE CX40 TO CS10B  ******************************************
                  *
                  * DDM   ***** Preserved *****

5900              KK   RX40E
5901              RS       3    FLOW       0
5902              RC    0.03    0.02    0.03    1961  0.0010
5903              RX       0       1      11      18      33      40      50      51
5904              RY      15       7       7       0       0       7       7      15
                  *
                  * DDM   ***** Preserved *****

5905              KK    S10B   BASIN
5906              KM   SUB-BASIN S10B
5907              KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5908              KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
5909              KM     L =  .69  Kb = .053  Adj. Slope =   14.0
5910              BA    .135
5911              LG    0.25    0.15    7.30    0.13      37
5912              UC   0.600   0.488
5913              UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5914              UA     100
                  *
                  *
                  * *** COMBINE BASIN S10B AND RX40E ********************************
                  *
                  * DDM   ***** Preserved *****

5915              KK   CS10B
5916              HC       2
                  *
                  * *** ROUTE RS10B    ************************************************
                  *
                  * ROUTE RS10B IS 2012 FT WITH A SLOPE OF .006
                  * CROSS SECTION IS A MAN MADE CHANNEL (MEASURED)
                  *
                  * *** ROUTE S10B THROUGH S10A  ***************************************
                  *
                  * DDM   ***** Preserved *****
```



```
LINE              ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5917              KK   RS10B
5918              RS       1    FLOW       0
5919              RC    0.03    0.02    0.03    2012   0.006
5920              RX       0       1       5      15      20      30      34      35
5921              RY      13       5       5       0       0       5       5      13
```

```
                 *
                 * DDM   ***** Preserved *****

5922             KK    S10A   BASIN
5923             KM   SUB-BASIN S10A
5924             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5925             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
5926             KM     L =  .69  Kb = .058  Adj. Slope =   20.0
5927             BA    .046
5928             LG    0.24    0.22    6.40    0.18      30
5929             UC   0.554   0.826
5930             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5931             UA     100
                 * DDM   ***** Preserved *****

5932             KK     S10   BASIN
5933             KM   SUB-BASIN S10
5934             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5935             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
5936             KM     L =  .76  Kb = .055  Adj. Slope =   18.0
5937             BA    .112
5938             LG    0.22    0.17    6.80    0.16      39
5939             UC   0.583   0.568
5940             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5941             UA     100
                 *
                 * *** COMBINE BASIN S10A, S10, RS10, AND RS10C   **********************
                 *
                 * DDM   ***** Preserved *****

5942             KK    CS10
5943             HC       4
                 *
                 * *** ROUTE RS10     ************************************************
                 *
                 * ROUTE RS10 IS 562 FT WITH A SLOPE OF .0053
                 * CROSS SECTION IS THE GRAND AVE CHANNEL (MEASURED)
                 *
                 * *** ROUTE CS10 TO CN06  *******************************************
                 *
                 * DDM   ***** Preserved *****

5944             KK    RS10
5945             RD
5946             RC    0.03    0.02    0.03     562  0.0053
5947             RX       0       1      25      43      78      98     131     221
5948             RY      15       7       0       0      11      11       7       7
                 *
                 *
                 *
                 * ********************************************************************
                 * ********************************************************************
                 * **************                                    ****************
                 * **************        Combine with New River      ****************
                 * **************        at Concentration Point Cn06 ****************
                 * **************                                    ****************
                 * ********************************************************************
                 * ********************************************************************
                 *
                 *
                 *
                 * DDM   ***** Preserved *****
1                                    HEC-1 INPUT                                          PAGE24:

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5949             KK     N06   BASIN
5950             KM   SUB-BASIN N06
5951             KM   6-HOUR RAINFALL, PATTERN NO. 1.10 WAS USED TO FIND TC & R FOR THIS BASIN
5952             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .992
5953             KM     L =  .89  Kb = .035  Adj. Slope =   33.0
5954             BA    .594
5955             LG    0.17    0.21    4.25    0.45      39
5956             UC   0.596   0.311
```

```
5957          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5958          UA     100
              *
              *
              * ***   COMBINE BASIN N06, RN07, RN10, AND THE 'DUMMY' BASIN  **********
              *
              *
              * DDM   ***** Preserved *****

5959          KK    CN06
5960          HC       4   52.61
              *
              * *** ROUTE RN06    ***************************************************
              *
              * ROUTE RN06 IS 2625 FT WITH A SLOPE OF .0046
              * CROSS SECTION IS THE NEW RIVER (MEASURED)
              *
              * *** ROUTE CN06 TO CN05C ********************************************
              *
              *
              * DDM   ***** Preserved *****

5961          KK    RN06
5962          RS       1    FLOW      -1
5963          RC    0.03    0.03    0.03    2625   .0046
5964          RX       0      10      35     100     200     390     410     425
5965          RY      20      24       0       0       0       0      24      20
              *
              *
              * DDM   ***** Preserved *****

5966          KK    N05C   BASIN
5967          KM   SUB-BASIN N05C
5968          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5969          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
5970          KM     L =  .99  Kb = .042  Adj. Slope =   16.0
5971          BA    .277
5972          LG    0.23    0.25    5.30    0.31      29
5973          UC   0.650   0.473
5974          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5975          UA     100
              *
              * *** COMBINE N05C WITH EVERYTHING ABOVE AND ROUTE IT THROUGHT N05 *****
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5976          KK   CN05C
5977          HC       2
              *
              * *** ROUTE RN05C    ***************************************************
              *
              * ROUTE RN05C IS 2873 FT WITH A SLOPE OF .0045
              * CROSS SECTION IS THE NEW RIVER (MEASURED)
              *
              * *** ROUTE N05C THROUGH  N05   ****************************************
              *
              * DDM   ***** Preserved *****

5978          KK   RN05C
5979          RS       1    FLOW      -1
5980          RC    0.03    0.03    0.03    2873   .0045
5981          RX       0      10      35     100     200     390     410     425
5982          RY      20      24       0       0       0       0      24      20
              *
              *
              * DDM   ***** Preserved *****

5983          KK    N05B   BASIN
5984          KM   SUB-BASIN N05B
5985          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
5986          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
```

```
5987          KM     L = 1.68  Kb = .044  Adj. Slope =   15.0
5988          BA    .314
5989          LG    0.23    0.25    4.90    0.36      38
5990          UC   1.021   1.110
5991          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
5992          UA     100
              *
              * *** DIVERSION DN05B  ***********************************************
              * *** DIVERTED  MAIN (EAST) DIVERTED (SOUTH)  *************************
              *
              *
              * THIS FLOW IS DIVERTED. 90% FLOWS SOUTH TO 99TH AVE, AND 10% FLOWS EAST
              *
              *
              * DDM   ***** Preserved *****

5993          KK   DN05B
5994          DT  DN05BI
5995          DI       1      40      80     120     160     200     300     400     800
5996          DQ      .9      36      72     108     144     180     270     360     720
              *
              *
              * *** ROUTE RN05BE    ***********************************************
              *
              * ROUTE RN05BE IS 1370 FT WITH A SLOPE OF .0036
              * CROSS SECTION IS A ROAD WITH A DITCH ON THE LEFT
              *
              * *** ROUTE DN05B TO CN05       ***************************************
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE24

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5997          KK  RN05BE
5998          RS       5    FLOW       0
5999          RC    0.03    0.03    0.03    1370  0.0036
6000          RX       0     100     110     120     130     170     195     695
6001          RY       5       3       0       2       3       3       4       5
              *
              *
              * DDM   ***** Preserved *****

6002          KK    N05A   BASIN
6003          KM   SUB-BASIN N05A
6004          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6005          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6006          KM     L =  .61  Kb = .044  Adj. Slope =   23.0
6007          BA    .174
6008          LG    0.20    0.26    4.55    0.42      44
6009          UC   0.438   0.270
6010          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6011          UA     100
              *
              *
              * DDM   ***** Preserved *****

6012          KK     N05   BASIN
6013          KM   SUB-BASIN N05
6014          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6015          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
6016          KM     L =  .58  Kb = .041  Adj. Slope =   41.0
6017          BA    .276
6018          LG    0.15    0.14    4.30    0.47      57
6019          UC   0.621   0.483
6020          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6021          UA     100
              *
              * *** COMBINE BASIN N05A, BASIN N05, RN05BE, AND RN05C  ****************
              *
              * DDM   ***** Preserved *****

6022          KK    CN05
6023          HC       4
```

```
                 *
                 * *** ROUTE RN05    ***************************************************
                 *
                 * ROUTE RN05 IS 2728 FT WITH A SLOPE OF .0029
                 * CROSS SECTION IS THE NEW RIVER (MEASURED)
                 *
                 * *** ROUTE N05 TO  N04A   ****************************************
                 *
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE24
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6024             KK    RN05
6025             RS       4    FLOW       0
6026             RC    0.03    0.03    0.03    2728  0.0029
6027             RX       0      10      35     100     200     390     410     425
6028             RY      20      24       0       0       0       0      24      20
                 *
                 *
                 * *** RECALL DIVERTED  N05B ******************************************
                 *
                 * DDM   ***** Preserved *****

6029             KK  DN05BX
6030             DR  DN05BI
                 *
                 *
                 * *** ROUTE RN05BS  ****************************************************
                 *
                 * ROUTE RN05BS IS 2372 FT WITH A SLOPE OF .0055
                 * CROSS SECTION IS A ROAD
                 *
                 * *** ROUTE CN05B TO CN04A   *******************************************
                 *

6031             KK  RN05BS
6032             RS       7    FLOW       0
6033             RC    0.03    0.03    0.03    2372  0.0055
6034             RX       0       1      13      14     104     105     127     128
6035             RY      10       2       1    0.75    0.75       1       2      10
                 *
                 *
                 *
                 * DDM   ***** Preserved *****

6036             KK    N04A   BASIN
6037             KM   SUB-BASIN N04A
6038             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6039             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6040             KM     L =  .60  Kb = .047  Adj. Slope =   22.0
6041             BA    .067
6042             LG    0.19    0.25    4.30    0.51      55
6043             UC   0.433   0.453
6044             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6045             UA     100
                 *
                 * *** COMBINE BASIN N04A AND RN05BS  **********************************
                 *
                 * DDM   ***** Preserved *****

6046             KK   CN04A
6047             HC       3
                 *
                 *
                 * *** ROUTE RN04A  *****************************************************
                 *
                 * ROUTE RN04A IS 3178 FT WITH A SLOPE OF .0019
                 * CROSS SECTION IS NEW RIVER (MEASURED)
                 *
                 * *** ROUTE CNO4A TO CN04  *********************************************
                 *
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE246
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6048          KK   RN04A
6049          RS       1    FLOW      -1
6050          RC    0.03    0.03    0.03    3178  0.0019
6051          RX       0      10      35     100     200     390     410     425
6052          RY      20      24       0       0       0       0      24      20
              *
              * DDM   ***** Preserved *****

6053          KK     N04   BASIN
6054          KM   SUB-BASIN N04
6055          KM   6-HOUR RAINFALL, PATTERN NO. 1.29 WAS USED TO FIND TC & R FOR THIS BASIN
6056          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .989
6057          KM     L = 1.53  Kb = .036  Adj. Slope =   22.0
6058          BA    .826
6059          LG    0.19    0.26    6.00    0.20      39
6060          UC   0.750   0.421
6061          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6062          UA     100
              *
              *
              * *** STORAGE ROUTING LN04  ***********************************************
              * *** SPRINGER RANCH RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) **********
              * DDM   ***** Preserved *****

6063          KK    LN04
6064          DT   LN04D    15.3
6065          DI       0     100    1000   10000
6066          DQ       0     100    1000   10000
              *
              *
              *
              *  *** COMBINE RN04A AND BASIN NO4  ***********************************
              *
              * DDM   ***** Preserved *****

6067          KK    CN04
6068          HC       2
              *
              * *** ROUTE RN04  ****************************************************
              *
              * ROUTE RN04 IS 558 FT WITH A SLOPE OF .0036
              * CROSS SECTION IS NEW RIVER   *MEASURED
              *
              * *** ROUTE  CN04 TO CN03*    ****************************************
              *
              * DDM   ***** Preserved *****

6069          KK    RN04
6070          RD
6071          RC    0.03    0.03    0.03     558  0.0036
6072          RX       0     195     200     224     416     552     687     873
6073          RY      13      12      11      10       0       0      10      16
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6074          KK    S01G   BASIN
6075          KM   SUB-BASIN S01G
6076          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6077          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
6078          KM     L =  .92  Kb = .038  Adj. Slope =   16.0
6079          BA    .283
6080          LG    0.20    0.15    7.00    0.16      40
6081          UC   0.579   0.388
6082          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6083          UA     100
              *
              * *** ROUTE RS01G  ***************************************************
              *
```

```
                 * ROUTE RS01G IS 5223 FT WITH A SLOPE OF 0.0029
                 * CROSS SECTION IS A SUN CITY ROAD
                 *
                 * *** Route Flow from Basin S01G through S01D ******************
                 *
                 * DDM   ***** Preserved *****

6084             KK   RS01G
6085             RS      12    FLOW       0
6086             RC    0.03    0.02    0.03    5223  0.0029
6087             RX       0       1      30      31     141     142     171     172
6088             RY      12    1.25    0.25       0       0    0.25    1.25      12
                 *
                 * DDM   ***** Preserved *****

6089             KK    S01D   BASIN
6090             KM   SUB-BASIN S01D
6091             KM   6-HOUR RAINFALL, PATTERN NO. 1.13 WAS USED TO FIND TC & R FOR THIS BASIN
6092             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .992
6093             KM     L = 1.70  Kb = .039  Adj. Slope =   15.0
6094             BA    .629
6095             LG    0.23    0.25    5.40    0.29      33
6096             UC   0.979   0.720
6097             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6098             UA     100
                 *
                 *
                 * *** COMBINE BASIN S01D AND RS01G ************************************
                 *
                 * DDM   ***** Preserved *****

6099             KK   CS01D
6100             HC       2
                 *
                 *
                 * *** ROUTE RS01D  *******************************************
                 *
                 * ROUTE RS01D IS 3831 FT WITH A SLOPE OF 0.0023
                 * CROSS SECTION IS A SUN CITY ROAD
                 *
                 * *** Route Flow from Basin S01D and RS01G THROUGH S01C ********
                 *
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE24

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6101             KK   RS01D
6102             RS       8    FLOW       0
6103             RC    0.03    0.02    0.03    3831  0.0023
6104             RX       0       1      30      31     141     142     171     172
6105             RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
                 *
                 *
                 * DDM   ***** Preserved *****

6106             KK    S01H   BASIN
6107             KM   SUB-BASIN S01H
6108             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6109             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
6110             KM     L = 1.27  Kb = .040  Adj. Slope =   16.0
6111             BA    .324
6112             LG    0.23    0.25    5.20    0.33      29
6113             UC   0.783   0.649
6114             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6115             UA     100
                 *
                 * *** ROUTE RS01H  *******************************************
                 *
                 * ROUTE RS01H IS 2756 FT AND HAS A SLOPE OF 0.0029
                 * CROSS SECTION IS A SUN CITY ROAD
                 *
                 * *** Route Flow from Basin S01H through S01E   ****************
                 *
```

```
                * DDM   ***** Preserved *****

6116            KK   RS01H
6117            RS       6    FLOW       0
6118            RC    0.03    0.02    0.03    2756  0.0029
6119            RX       0       1      30      31      72      73     103     104
6120            RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
                *
                * DDM   ***** Preserved *****

6121            KK    S01E   BASIN
6122            KM   SUB-BASIN S01E
6123            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6124            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
6125            KM     L =  .79  Kb = .042  Adj. Slope =   16.0
6126            BA    .229
6127            LG    0.23    0.25    5.40    0.30      27
6128            UC   0.567   0.378
6129            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6130            UA     100
                *
                * *** COMBINE BASIN S01E AND RS01H ******************************
                *
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE24

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6131            KK   CS01E
6132            HC       2
                *
                *
                * *** ROUTE RS01E  *******************************************
                *
                * ROUTE RS01E IS 3245 FT WITH A SLOPE OF 0.0032
                * CROSS SECTION IS A SUN CITY ROAD
                *
                * *** Route Flow from Basin S01E and RS01H   *******************
                *
                * DDM   ***** Preserved *****

6133            KK   RS01E
6134            RS       6    FLOW       0
6135            RC    0.03    0.02    0.03    3245  0.0032
6136            RX       0       1      30      31      72      73     103     104
6137            RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
                *
                *
                * DDM   ***** Preserved *****

6138            KK    S01C   BASIN
6139            KM   SUB-BASIN S01C
6140            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6141            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
6142            KM     L = 1.06  Kb = .041  Adj. Slope =   15.0
6143            BA    .400
6144            LG    0.22    0.26    5.70    0.25      35
6145            UC   0.738   0.466
6146            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6147            UA     100
                *
                * *** COMBINE BASIN S01C, RS01E, AND RS01D  **********************
                *
                * DDM   ***** Preserved *****

6148            KK   CS01C
6149            HC       3
                *
                * *** ROUTE RS01C  *******************************************
                *
                * ROUTE RS01C IS 1239 FT WITH A SLOPE OF 0.0024
                * CROSS SECTION IS A SUN CITY ROAD
                *
                * *** ROUTE CS01C TO CS01B  ************************************
```

```
                    *
                    * DDM   ***** Preserved *****

LINE                ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6150                KK   RS01C
6151                RS       2    FLOW       0
6152                RC    0.03    0.02    0.03    1239  0.0024
6153                RX       0       1      21      22     142     143     163     164
6154                RY      10       2       1    0.75    0.75       1       2      10
                    *
                    * DDM   ***** Preserved *****

6155                KK    S01I   BASIN
6156                KM   SUB-BASIN S01I
6157                KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6158                KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
6159                KM     L =  .91  Kb = .043  Adj. Slope =   20.0
6160                BA    .232
6161                LG    0.22    0.25    4.80    0.38      41
6162                UC   0.575   0.427
6163                UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6164                UA     100
                    *
                    * *** ROUTE RS01I  ********************************************
                    *
                    * ROUTE RS01I IS 2591 FT WITH A SLOPE OF 0.0039
                    * CROSS SECTION IS A SUN CITY ROAD
                    *
                    * *** Route Flow from Basin S01I through S01F   ***************
                    *
                    * DDM   ***** Preserved *****

6165                KK   RS01I
6166                RS       5    FLOW       0
6167                RC    0.03    0.02    0.03    2591  0.0039
6168                RX       0       1      30      31      72      73     103     104
6169                RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
                    *
                    *
                    * DDM   ***** Preserved *****

6170                KK    S01F   BASIN
6171                KM   SUB-BASIN S01F
6172                KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6173                KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6174                KM     L =  .77  Kb = .040  Adj. Slope =   16.0
6175                BA    .151
6176                LG    0.22    0.25    4.80    0.41      22
6177                UC   0.583   0.484
6178                UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6179                UA     100
                    *
                    * *** COMBINE BASIN S01F AND RS01I  ************************************
                    *
                    * DDM   ***** Preserved *****
```



```
LINE                ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6180                KK   CS01F
6181                HC       2
                    *
                    *
                    * *** ROUTE RS01F  ********************************************
                    *
                    * ROUTE RS01F IS 3731 FT WITH A SLOPE OF 0.0029
                    * CROSS SECTION IS A SUN CITY ROAD
                    *
                    * *** ROUTE CS01F THROUGH BASIN S01B   ************************
                    *
                    * DDM   ***** Preserved *****
```

```
6182        KK   RS01F
6183        RS       8    FLOW       0
6184        RC    0.03    0.02    0.03    3731  0.0029
6185        RX       0       1      30      31      72      73     103     104
6186        RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
            *
            * DDM   ***** Preserved *****

6187        KK    S01B   BASIN
6188        KM   SUB-BASIN S01B
6189        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6190        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
6191        KM     L =  .90  Kb = .047  Adj. Slope =   19.0
6192        BA    .311
6193        LG    0.24    0.25    5.10    0.31      40
6194        UC   0.621   0.390
6195        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6196        UA     100
            *
            * *** COMBINE BASIN S01B, RS01F, AND RS01C  ******************
            *
            * DDM   ***** Preserved *****

6197        KK   CS01B
6198        HC       3
            *
            *
            * *** ROUTE RS01B  ******************************************
            *
            * ROUTE RS01B IS 1419 FT WITH A SLOPE OF 0.0014
            * CROSS SECTION IS A SUN CITY ROAD
            *
            * *** ROUTE CS01B THROUGH S01A ******************************
            *
            * DDM   ***** Preserved *****
1                                   HEC-1 INPUT                                          PAGE252

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6199        KK   RS01B
6200        RS       2    FLOW       0
6201        RC    0.03    0.02    0.03    1419   .0014
6202        RX       0       1      30      31     141     142     171     172
6203        RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
            *
            * DDM   ***** Preserved *****

6204        KK    S01A   BASIN
6205        KM   SUB-BASIN S01A
6206        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6207        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
6208        KM     L = 1.22  Kb = .040  Adj. Slope =   16.0
6209        BA    .350
6210        LG    0.23    0.25    4.70    0.41      27
6211        UC   0.821   0.634
6212        UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6213        UA     100
            *
            * *** COMBINE BASIN S01A AND RS01B   ***************************
            *
            * DDM   ***** Preserved *****

6214        KK   CS01A
6215        HC       2
            *
            * *** ROUTE RS01A  ******************************************
            *
            * ROUTE RS01A IS 1563 FT WITH A SLOPE OF 0.0026
            * CROSS SECTION IS THE OLIVE ROAD CHANNEL (MEASURED)
            *
            * *** ROUTE CS01A THROUGH S01  ******************************
            *
            * DDM   ***** Preserved *****
```

```
6216          KK   RS01A
6217          RS       1    FLOW       0
6218          RC    0.03    0.02    0.03    1563  0.0026
6219          RX       0       1      30      40      50      60      88     154
6220          RY      17       9       8       0       0       8      10      12
              *
              * DDM   ***** Preserved *****

6221          KK     S01   BASIN
6222          KM   SUB-BASIN S01
6223          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6224          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
6225          KM     L = 1.35  Kb = .046  Adj. Slope =   20.0
6226          BA    .256
6227          LG    0.24    0.25    4.80    0.37      36
6228          UC   0.842   0.845
6229          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6230          UA     100
              *
              *
              * *** COMBINE BASIN S01  AND RS01A  ************************************
              *
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6231          KK    CS01
6232          HC       2
              *
              * *** ROUTE RS01  ****************************************************
              *
              * ROUTE RS01 IS 733 FT WITH A SLOPE OF 0.0109
              * CROSS SECTION IS THE OLIVE ROAD CHANNEL (MEASURED)
              *
              * *** ROUTE CS01 TO CN03*    ******************************************
              *
              * DDM   ***** Preserved *****

6233          KK    RS01
6234          KO       3                                 21
6235          RS       1    FLOW       0
6236          RC    0.03    0.03    0.03     733   .0109
6237          RX       0     123     193     242     264     314     364     437
6238          RY      15      14      12       0       0      12      14      15
              *
              *
              *       The south side of Sun City dumps into the New River at
              *       concentration point CN03*.
              *
              *
              * *** COMBINE RN04 AND RS01  ******************************************
              *
              * DDM   ***** Preserved *****

6239          KK   CN03*
6240          HC       2
              *
              * *** ROUTE RN03*   ***************************************************
              *
              * ROUTE RN03* IS 4858 FT WITH A SLOPE OF 0.0019
              * CROSS SECTION IS NEW RIVER (MEASURED)
              *
              * *** ROUTE CN03* TO CN03   *******************************************
              *
              * DDM   ***** Preserved *****

6241          KK   RN03*
6242          KO       3                                 21
6243          RS       7    FLOW       0
6244          RC    0.03    0.03    0.03    4858  0.0019
6245          RX       0     523     593     642     864     914    1064    1164
6246          RY      15      14      12       0       0      12      14      15
```

```
                    *
                    *
                    * DDM   ***** Preserved *****

LINE                ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6247                KK    N03A   BASIN
6248                KM   SUB-BASIN N03A
6249                KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6250                KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
6251                KM     L = 1.32  Kb = .045  Adj. Slope =   15.0
6252                BA    .389
6253                LG    0.23    0.26    4.50    0.40      31
6254                UC   0.917   0.719
6255                UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6256                UA     100
                    *
                    *
                    * *** ROUTE RN03A   ***************************************************
                    *
                    * ROUTE RN03A IS 1914 FT WITH A SLOPE OF 0.0094
                    * CROSS SECTION IS NORTHERN AVE INTO NEW RIVER (MEASURED)
                    *
                    * *** ROUTE N03A TO CN03  ********************************************
                    *
                    * DDM   ***** Preserved *****

6257                KK   RN03A
6258                KO       3
6259                RS       2    FLOW       0
6260                RC    0.03    0.02    0.03    1914  0.0094
6261                RX       0     100     200     210     220     230     250     270
6262                RY       5       4       3       0       3       4       4       5
                    *
                    * DDM   ***** Preserved *****

6263                KK    N03B   BASIN
6264                KM   SUB-BASIN N03B
6265                KM   6-HOUR RAINFALL, PATTERN NO. 1.13 WAS USED TO FIND TC & R FOR THIS BASIN
6266                KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .992
6267                KM     L = 1.30  Kb = .067  Adj. Slope =   22.0
6268                BA    .627
6269                LG    0.39    0.07    8.40    0.10       9
6270                UC   0.958   0.568
6271                UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6272                UA     100
                    *
                    * *** ROUTE RN03B   ***************************************************
                    *
                    * ROUTE RN03B IS 748 FT WITH A SLOPE OF 0.012
                    * CROSS SECTION IS NORTHERN AVE INTO NEW RIVER (MEASURED)
                    *
                    * *** ROUTE N03B TO CN03  ********************************************
                    *
                    * DDM   ***** Preserved *****
```



```
LINE                ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6273                KK   RN03B
6274                KO       3
6275                RS       1    FLOW       0
6276                RC    0.03    0.02    0.03     748   0.012
6277                RX       0      25      50      60      70      80     180     280
6278                RY       5       4       4       3       0       3       4       5
                    *
                    * DDM   ***** Preserved *****

6279                KK     N03   BASIN
6280                KM   SUB-BASIN N03
6281                KM   6-HOUR RAINFALL, PATTERN NO. 1.11 WAS USED TO FIND TC & R FOR THIS BASIN
6282                KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .992
```

```
6283          KM     L =  .59  Kb = .046  Adj. Slope =   36.0
6284          BA    .604
6285          LG    0.24    0.18    4.20    0.49      25
6286          UC   1.150   0.780
6287          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6288          UA     100
              *
              *
              * *** COMBINE RN03A, RN03B, BASIN N03, AND RN04  **********************
              *
              * DDM   ***** Preserved *****

6289          KK    CN03
6290          HC       4
              *
              * *** ROUTE RN03    ****************************************************
              *
              * ROUTE RN03 IS 3072 FT WITH A SLOPE OF 0.0036
              * CROSS SECTION IS NEW RIVER (MEASURED)
              *
              * *** ROUTE N03 TO CN02B  ********************************************
              *
              * DDM   ***** Preserved *****

6291          KK    RN03
6292          KO       3                                21
6293          RS       3    FLOW       0
6294          RC    0.03    0.02    0.03    3072  0.0036
6295          RX       0      10      35     100     200     390     410     425
6296          RY      20      24       0       0       0       0      24      20
              *
              * DDM   ***** Preserved *****

6297          KK    N02B   BASIN
6298          KM   SUB-BASIN N02B
6299          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6300          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6301          KM     L =  .71  Kb = .076  Adj. Slope =   28.0
6302          BA    .152
6303          LG    0.39    0.08    4.50    0.52      19
6304          UC   0.642   0.503
1                                          HEC-1 INPUT                                          PAGE256

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6305          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6306          UA     100
              *
              *
              * *** STORAGE ROUTING LN02B ******************************************
              * *** LIGHT INDUSTRIAL DEVELOPMENT STORAGE (ACCOUNTED) ******************
              * DDM   ***** Preserved *****

6307          KK   LN02B
6308          DT  LN02BD     3.6
6309          DI       0     100    1000   10000
6310          DQ       0     100    1000   10000
              *
              *
              * *** COMBINE RN03 AND N02B   ****************************************
              *
              * DDM   ***** Preserved *****

6311          KK   CN02B
6312          HC       2
              *
              *
              * *** ROUTE RN02B    ****************************************************
              *
              * ROUTE RN02B IS 3169 FT WITH A SLOPE OF 0.0019
              * CROSS SECTION IS NEW RIVER (MEASURED)
              *
              * *** ROUTE CN02B TO CN02 ********************************************
              *
              * DDM   ***** Preserved *****
```

```
6313          KK   RN02B
6314          KO       3                                21
6315          RS       4    FLOW       0
6316          RC    0.03    0.02    0.03    3169  0.0019
6317          RX       0      10      35     100     200     390     410     425
6318          RY      20      24       0       0       0       0      24      20
              *
              *
              * DDM   ***** Preserved *****

6319          KK     N02   BASIN
6320          KM   SUB-BASIN N02
6321          KM   6-HOUR RAINFALL, PATTERN NO. 1.24 WAS USED TO FIND TC & R FOR THIS BASIN
6322          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .990
6323          KM     L = 1.58  Kb = .032  Adj. Slope =   25.0
6324          BA    .759
6325          LG    0.16    0.26    5.10    0.26      15
6326          UC   0.700   0.420
6327          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6328          UA     100
              *
              *
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE25

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6329          KK    N02A   BASIN
6330          KM   SUB-BASIN N02A
6331          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6332          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6333          KM     L =  .81  Kb = .027  Adj. Slope =   33.0
6334          BA    .178
6335          LG    0.11    0.33    4.35    0.39      21
6336          UC   0.321   0.237
6337          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6338          UA     100
              *
              *
              * *** COMBINE BASIN N02, N02A, AND RN02B  ******************************
              *
              * DDM   ***** Preserved *****

6339          KK    CN02
6340          HC       3
              *
              *
              * DDM   ***** Preserved *****

6341          KK    S20A   BASIN
6342          KM   SUB-BASIN S20A
6343          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6344          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6345          KM     L =  .87  Kb = .050  Adj. Slope =   21.0
6346          BA    .160
6347          LG    0.23    0.15    8.80    0.07      44
6348          UC   0.554   0.488
6349          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6350          UA     100
              *
              *
              * *** ROUTE RS20A    ***************************************************
              *
              * ROUTE RS20A IS 1407 FT WITH A SLOPE OF 0.0028
              * CROSS SECTION IS THE GRAND AVE CHANNEL WEST (MEASURED)
              *
              * *** ROUTE CS20A TO CS20 ********************************************
              *
              * DDM   ***** Preserved *****

6351          KK   RS20A
6352          RS       2    FLOW       0
6353          RC    0.03    0.02    0.03    1407  0.0028
```

```
6354          RX       0      90     123     143     178     196     220     221
6355          RY       7       7      11      11       0       0       7      15
              *
              *
              * DDM   ***** Preserved *****
                                          HEC-1 INPUT                                                          PAGE25

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6356          KK     S20   BASIN
6357          KM   SUB-BASIN S20
6358          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6359          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6360          KM     L =  .85  Kb = .050  Adj. Slope =   31.0
6361          BA    .137
6362          LG    0.23    0.15    8.80    0.07      44
6363          UC   0.471   0.437
6364          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6365          UA     100
              *
              *
              * *** COMBINE BASIN S20 AND RS20A  ************************************
              *
              * DDM   ***** Preserved *****

6366          KK    CS20
6367          HC       2
              *
              *
              *
              * *** ROUTE RS20    ***************************************************
              *
              * ROUTE RS20 IS 1217 FT WITH A SLOPE OF 0.0123
              * CROSS SECTION IS THE GRAND AVE CHANNEL WEST (MEASURED)
              *
              * *** ROUTE CS20 TO CA99A ********************************************
              *
              * DDM   ***** Preserved *****

6368          KK    RS20
6369          RS       2    FLOW       0
6370          RC    0.05     .04    0.05    1217  0.0123
6371          RX       0      90     123     143     178     196     220     221
6372          RY       7       7      11      11       0       0       7      15
              *
              *
              * DDM   ***** Preserved *****

6373          KK    A05A   BASIN
6374          KM   SUB-BASIN A05A
6375          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6376          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6377          KM     L =  .78  Kb = .047  Adj. Slope =   27.0
6378          BA    .144
6379          LG    0.24    0.15    8.80    0.08      31
6380          UC   0.446   0.374
6381          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6382          UA     100
              *
              *
              * *** ROUTE RA05A    ***************************************************
              *
              * ROUTE RA05A IS 4306 FT WITH A SLOPE OF 0.0084
              * CROSS SECTION IS A SUN CITY STREET
              *
              * *** ROUTE A05A TO CA99N ********************************************
              *
              * DDM   ***** Preserved *****
1                                         HEC-1 INPUT                                                          PAGE25

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6383          KK   RA05A
```

```
6384          RS      12    FLOW       0
6385          RC    0.04    0.03    0.04    4306  0.0084
6386          RX       0       1      30      31     141     142     171     172
6387          RY    9.25    1.25    0.25       0       0    0.25    1.25    9.25
              *
              *
              * DDM   ***** Preserved *****

6388          KK    A99N   BASIN
6389          KM   SUB-BASIN A99N
6390          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6391          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6392          KM     L =  .70  Kb = .046  Adj. Slope =   44.0
6393          BA    .161
6394          LG    0.21    0.24    6.20    0.21      45
6395          UC   0.367   0.259
6396          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6397          UA     100
              *
              *
              * *** COMBINE BASIN A99N, RA05A, AND RS20  ****************************
              *
              * DDM   ***** Preserved *****

6398          KK   CA99N
6399          HC       3
              *
              *
              * *** DIVERSION RECOVER DRA09SI  ********************************************
              * RECOVER DIVERTED FLOW FROM CA09S
              * DDM   ***** Preserved *****
              *

6400          KK  DRA09S
6401          DR   A09SI
              *
              * *** ROUTE RA09SW    ************************************************
              *
              * ROUTE RA09SW IS 6792 FT WITH A SLOPE OF 0.0103
              * CROSS SECTION IS A MEDIUM CHANNEL
              *
              * *** ROUTE CA09S TO CA99Y ******************************************
              *
              * DDM   ***** Preserved *****

6402          KK  RA09SW
6403          RS       1    FLOW       0
6404          RC    0.05    0.05    0.05    6792  0.0103
6405          RX       0      50     250     350     360     420     620     720
6406          RY      10       8       6       2       0       6       8      10
              *
              * DDM   ***** INSERTED *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6407          KK    A99Y   BASIN
6408          KM   SUB-BASIN A99Y
6409          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6410          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
6411          KM     L = 1.01  Kb = .048  Adj. Slope =   38.0
6412          BA    .318
6413          LG    0.35    0.35    4.35    0.40       0
6414          UC   0.550   0.369
6415          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6416          UA     100
              *
              * COMBINE RA09SW AND BASIN A99Y  ************************************
              *

6417          KK   CA99Y
6418          HC       2
              *
              * DDM   ***** Inserted *****
```

```
6419          KK    A99X   BASIN
6420          KM   SUB-BASIN A99X
6421          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6422          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
6423          KM     L =  .61  Kb = .033  Adj. Slope =   57.0
6424          BA    .264
6425          LG    0.21    0.28    4.20    0.53      39
6426          UC   0.242   0.110
6427          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6428          UA     100
              *
              * *** DIVERSION RECOVER DRA09Q  ***********************************************
              * RECOVER DIVERTED FLOW FROM CA09Q
              *

6429          KK  DRA09Q
6430          DR   A09QI
              *
              * *** ROUTE RA09QW    ***************************************************
              *
              * ROUTE RA09QW IS 2468 FT WITH A SLOPE OF 0.0158
              * CROSS SECTION IS A MEDIUM CHANNEL
              *
              * *** ROUTE CA09Q TO CA10A ******************************************
              *
              * DDM   ***** Preserved *****

6431          KK  RA09QW
6432          RS       1    FLOW       0
6433          RC    0.05    0.05    0.05    2468  0.0158
6434          RX       0      50     250     350     360     420     620     720
6435          RY      10       8       6       2       0       6       8      10
              *
              * DDM   ***** Inserted *****
1                                          HEC-1 INPUT                                          PAGE26:

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6436          KK    A10A   BASIN
6437          KM   SUB-BASIN A10A
6438          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6439          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6440          KM     L =  .65  Kb = .051  Adj. Slope =   74.0
6441          BA    .189
6442          LG    0.33    0.33    5.30    0.24       2
6443          UC   0.304   0.181
6444          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6445          UA     100
              *
              * *** COMBINE BASIN A10A AND RA09QW  ******************************************
              *

6446          KK   CA10A
6447          HC       2
              *
              * *** ROUTE RA10A    ***************************************************
              *
              * ROUTE RA10A IS 2831 FT WITH A SLOPE OF 0.0148
              * CROSS SECTION IS A MEDIUM CHANNEL
              *
              * *** ROUTE TO CA10 FROM CA10A ******************************************
              *
              * DDM   ***** Preserved *****

6448          KK   RA10A
6449          RS       5    FLOW       0
6450          RC    0.05    0.05    0.05    2831  0.0148
6451          RX       0      50     250     350     360     420     620     720
6452          RY      10       8       6       2       0       6       8      10
              *
              * DDM   ***** Inserted *****

6453          KK     A10   BASIN
```

```
6454          KM   SUB-BASIN A10
6455          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6456          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
6457          KM     L =  .50  Kb = .050  Adj. Slope =   74.0
6458          BA    .214
6459          LG    0.34    0.35    4.65    0.32       1
6460          UC   0.246   0.108
6461          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6462          UA     100
              *
              * *** COMBINE BASIN A10 AND RA10A  ************************************
              *

6463          KK    CA10
6464          HC       2
              *
              *
              * *** COMBINE TO PREVENT ERROR  ****************************************
              * THIS COMBINES CN02, CA99N, BASIN A99X, CA99Y, AND CA10  **********
              *
1                                          HEC-1 INPUT                                          PAGE26

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6465          KK  DUMMY2
6466          HC       5
              *
              * *** DIVERSION RECOVER DRX11I  ************************************************
              * RECOVER DIVERTED FLOW FROM CX11
              *

6467          KK  DRX11I
6468          DR    X11I
              *
              * *** ROUTE RX11W    ************************************************
              *
              * ROUTE RX11W IS 1963 FT WITH A SLOPE OF 0.0214
              * CROSS SECTION IS A SMALL NATURAL WASH
              *
              * *** ROUTE TO CX11 FROM CA99W ********************************************

6469          KK   RX11W
6470          RS       5    FLOW       0
6471          RC    0.05    0.05    0.05    1963  0.0214
6472          RX       0     350     450     480     482     510     610     910
6473          RY       7       6       5       1       0       5       6       7
              *
              * DDM   ***** Inserted *****

6474          KK    A99V   BASIN
6475          KM   SUB-BASIN A99V
6476          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6477          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
6478          KM     L =  .91  Kb = .051  Adj. Slope =   48.0
6479          BA    .207
6480          LG    0.35    0.40    6.00    0.18       0
6481          UC   0.367   0.245
6482          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6483          UA     100
              *
              *
              * *** COMBINE BASIN A99V AND RX11W  ************************************
              *

6484          KK   CA99V
6485          HC       2
              *
              * *** DIVERSION RECOVER DRA09L  ************************************************
              * *** RECOVER DIVERTED FLOW FROM CA09L ****************************************
              * DDM   ***** Preserved *****

6486          KK  DRA09L
6487          DR   A09LI
              *
```

```
                 * *** ROUTE RA09LW  ************************************************************
                 *
                 * ROUTE RA09LW IS 2590 FT WITH A SLOPE OF .0143
                 * CROSS SECTION IS A CHANNEL ON BOTH SIDES OF ROAD
                 *
                 * *** ROUTE FLOW TO CA99W FROM CA09L  ***************************
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE26

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6488             KK  RA09LW
6489             RS       1    FLOW       0
6490             RC    0.04    0.03    0.04    2590   .0143
6491             RX       0       1      11      21      31      61     101     141
6492             RY      16       8       8       2       8       8       4       8
                 *
                 * DDM   ***** Preserved *****

6493             KK    A99W   BASIN
6494             KM   SUB-BASIN A99W
6495             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6496             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
6497             KM     L =  .63  Kb = .049  Adj. Slope =   11.0
6498             BA    .215
6499             LG    0.29    0.30    6.40    0.17      15
6500             UC   0.646   0.378
6501             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6502             UA     100
                 *
                 *
                 *
                 * *** STORAGE ROUTING LA99W ***********************************************
                 * *** DEER VALLEY RANCH RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *******
                 * DDM   ***** Preserved *****

6503             KK   LA99W
6504             DT  LA99WD     7.1
6505             DI       0     100    1000   10000
6506             DQ       0     100    1000   10000
                 *
                 *
                 *
                 * *** COMBINE  CA99W ******************************************************
                 * *** COMBINE  RA09LW AND A99W   ******************************************
                 * DDM   ***** Preserved *****

6507             KK   CA99W
6508             HC       2
                 *
                 * DDM   ***** Inserted *****

6509             KK    A99U   BASIN
6510             KM   SUB-BASIN A99U
6511             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6512             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6513             KM     L =  .57  Kb = .057  Adj. Slope =   61.0
6514             BA    .070
6515             LG    0.35    0.35    3.71    0.56       0
6516             UC   0.333   0.317
6517             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6518             UA     100
                 *
                 * DDM   ***** Inserted *****
1                                          HEC-1 INPUT                                          PAGE264

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6519             KK    A99S   BASIN
6520             KM   SUB-BASIN A99S
6521             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6522             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6523             KM     L =  .56  Kb = .057  Adj. Slope =   18.0
```

```
6524          BA    .077
6525          LG    0.35    0.35    3.64    0.59       0
6526          UC   0.613   0.583
6527          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6528          UA     100
              *
              * DDM   ***** Inserted *****

6529          KK    A08A   BASIN
6530          KM   SUB-BASIN A08A
6531          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6532          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6533          KM     L =  .92  Kb = .044  Adj. Slope =   12.0
6534          BA    .138
6535          LG    0.20    0.30    3.31    0.77      18
6536          UC   0.867   0.913
6537          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6538          UA     100
              *
              *
              * *** ROUTE RA08A  ************************************************************
              *
              * ROUTE RA08A IS 1747 FT WITH A SLOPE OF .0057
              * CROSS SECTION IS A SMALL NATURAL WASH
              *
              * *** ROUTE FLOW TO CA08 FROM CA08A  ***************************
              * DDM   ***** Preserved *****

6539          KK   RA08A
6540          RS       6    FLOW       0
6541          RC    0.05    0.05    0.05    1747  0.0057
6542          RX       0     350     450     480     482     510     610     910
6543          RY       7       6       5       1       0       5       6       7
              *
              *
              * DDM   ***** Inserted *****

6544          KK    A99R   BASIN
6545          KM   SUB-BASIN A99R
6546          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6547          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
6548          KM     L =  .19  Kb = .060  Adj. Slope =   37.0
6549          BA    .037
6550          LG    0.31    0.31    3.55    0.66      12
6551          UC   0.221   0.120
6552          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6553          UA     100
              *
              * *** ROUTE RA99R  ************************************************************
              *
              * ROUTE RA99R IS 2159 FT WITH A SLOPE OF .0032
              * CROSS SECTION IS A SMALL NATURAL WASH
              *
              * *** ROUTE FLOW TO CA08 FROM CA99R  ***************************
              * DDM   ***** Preserved *****
1                                        HEC-1 INPUT                                          PAGE26
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6554          KK   RA99R
6555          RS       9    FLOW       0
6556          RC    0.05    0.05    0.05    2159   .0032
6557          RX       0     350     450     480     482     510     610     910
6558          RY       7       6       5       1       0       5       6       7
              *
              *
              * DDM   ***** Inserted *****

6559          KK     A08   BASIN
6560          KM   SUB-BASIN A08
6561          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6562          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6563          KM     L =  .11  Kb = .057  Adj. Slope =   36.0
6564          BA    .077
```

```
6565          LG    0.30    0.31    3.19    0.88      14
6566          UC   0.162   0.036
6567          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6568          UA     100
              *
              *
              * *** COMBINE  CA08 ***********************************************************
              * *** COMBINE RA99R AND RA08A   ***********************************************
              * DDM   ***** Preserved *****

6569          KK    CA08
6570          HC       3
              *
              *
              * *** COMBINE HYDROGRAPHS TO PREVENT ERROR ***********************************
              * *** COMBINE CA08, CA99S, CA99U, CA99W, AND CA99V  ***************************
              * DDM   ***** Preserved *****

6571          KK  DUMMY3
6572          HC       6
              *
              * DDM   ***** Inserted *****

6573          KK    A99P   BASIN
6574          KM   SUB-BASIN A99P
6575          KM   6-HOUR RAINFALL, PATTERN NO. 1.08 WAS USED TO FIND TC & R FOR THIS BASIN
6576          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .993
6577          KM     L = 1.34  Kb = .040  Adj. Slope =   57.0
6578          BA    .575
6579          LG    0.25    0.28    5.40    0.26      27
6580          UC   0.508   0.302
6581          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6582          UA     100
              *
              * DDM   ***** Inserted *****
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6583          KK     A05   BASIN
6584          KM   SUB-BASIN A05
6585          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6586          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6587          KM     L =  .38  Kb = .054  Adj. Slope =  134.0
6588          BA    .131
6589          LG    0.30    0.30    3.95    0.52      19
6590          UC   0.192   0.087
6591          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6592          UA     100
              *
              *
              * DDM   ***** Inserted *****

6593          KK    A99O   BASIN
6594          KM   SUB-BASIN A99O
6595          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6596          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6597          KM     L =  .27  Kb = .055  Adj. Slope =   44.0
6598          BA    .102
6599          LG    0.29    0.29    5.00    0.30      27
6600          UC   0.229   0.093
6601          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6602          UA     100
              *
              * DDM   ***** Inserted *****

6603          KK    A99M   BASIN
6604          KM   SUB-BASIN A99M
6605          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6606          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6607          KM     L =  .35  Kb = .037  Adj. Slope =  169.0
6608          BA    .060
6609          LG    0.14    0.27    4.30    0.55      67
6610          UC   0.138   0.088
```

```
6611          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6612          UA     100
              *
              * DDM   ***** Inserted *****

6613          KK    A99L   BASIN
6614          KM   SUB-BASIN A99L
6615          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6616          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6617          KM     L =  .26  Kb = .048  Adj. Slope =  216.6
6618          BA    .078
6619          LG    0.21    0.26    3.95    0.59      44
6620          UC   0.125   0.054
6621          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6622          UA     100
              *
              * *** COMBINE THE HYDROGRAPHS TO PREVENT ERROR  *************************
              * *** COMBINE BASINS A99M, A99O, A05, A99P, AND A99L  ********************
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE26

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6623          KK  DUMMY4
6624          HC       6
              *
              * DDM   ***** Inserted *****

6625          KK    A99K   BASIN
6626          KM   SUB-BASIN A99K
6627          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6628          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6629          KM     L =  .71  Kb = .040  Adj. Slope =   96.0
6630          BA    .106
6631          LG    0.17    0.27    4.30    0.50      46
6632          UC   0.250   0.217
6633          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6634          UA     100
              *
              * DDM   ***** Inserted *****

6635          KK    A99J   BASIN
6636          KM   SUB-BASIN A99J
6637          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6638          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6639          KM     L =  .85  Kb = .044  Adj. Slope =   51.0
6640          BA    .136
6641          LG    0.19    0.25    4.25    0.51      51
6642          UC   0.371   0.337
6643          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6644          UA     100
              *
              * DDM   ***** Inserted *****

6645          KK    A99I   BASIN
6646          KM   SUB-BASIN A99I
6647          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6648          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6649          KM     L =  .62  Kb = .050  Adj. Slope =   60.0
6650          BA    .144
6651          LG    0.23    0.26    4.30    0.47      37
6652          UC   0.304   0.203
6653          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6654          UA     100
              *
              * DDM   ***** Inserted *****

6655          KK    A04A   BASIN
6656          KM   SUB-BASIN A04A
6657          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6658          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
6659          KM     L =  .75  Kb = .049  Adj. Slope =   31.0
6660          BA    .222
6661          LG    0.24    0.25    4.60    0.39      40
```

```
6662          UC   0.442   0.280
6663          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6664          UA     100
              *
              * *** ROUTE RA04A  ************************************************************
              *
              * ROUTE RA04A IS 1051 FT WITH A SLOPE OF .0019
              * CROSS SECTION IS A SMALL NATURAL WASH
              *
              * *** ROUTE FLOW TO CA04 FROM CA04A  ***************************
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6665          KK   RA04A
6666          RS       4    FLOW       0
6667          RC    0.05    0.05    0.05    1051  0.0019
6668          RX       0     350     450     480     482     510     610     910
6669          RY       7       6       5       1       0       5       6       7
              *
              * DDM   ***** Inserted *****

6670          KK     A04   BASIN
6671          KM   SUB-BASIN A04
6672          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6673          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6674          KM     L =  .45  Kb = .049  Adj. Slope =   44.0
6675          BA    .078
6676          LG    0.28    0.35    3.23    0.78       2
6677          UC   0.313   0.230
6678          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6679          UA     100
              *
              * *** COMBINE BASIN A04 AND RA04A  ****************************************
              *

6680          KK    CA04
6681          HC       2
              *
              * *** ROUTE RA04  ************************************************************
              *
              * ROUTE RA04 IS 3194 FT WITH A SLOPE OF .0031
              * CROSS SECTION IS A SMALL NATURAL WASH
              *
              * *** ROUTE FLOW TO CA03D FROM CA04  ***************************
              * DDM   ***** Preserved *****

6682          KK    RA04
6683          RS       9    FLOW       0
6684          RC    0.05    0.05    0.05    3194   .0031
6685          RX       0     350     450     480     482     510     610     910
6686          RY       7       6       5       1       0       5       6       7
              *
              * DDM   ***** Inserted *****

6687          KK    A03D   BASIN
6688          KM   SUB-BASIN A03D
6689          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6690          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6691          KM     L =  .61  Kb = .054  Adj. Slope =   16.0
6692          BA    .128
6693          LG    0.35    0.35    3.05    0.90       0
6694          UC   0.717   0.556
6695          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6696          UA     100
              *
              *
              * *** COMBINE BASIN A03D AND RA04  ****************************************
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
6697          KK   CA03D
6698          HC       2
              *
              * *** ROUTE RA03D  ************************************************************
              *
              * ROUTE RA03D IS 2906 FT WITH A SLOPE OF .0031
              * CROSS SECTION IS A SMALL NATURAL WASH
              *
              * *** ROUTE FLOW TO CA03 FROM CA03D  **************************
              * DDM   ***** Preserved *****

6699          KK   RA03D
6700          RS       8    FLOW       0
6701          RC    0.05    0.05    0.05    2906   .0031
6702          RX       0     350     450     480     482     510     610     910
6703          RY       7       6       5       1       0       5       6       7
              *
              * DDM   ***** Inserted *****

6704          KK    A03E   BASIN
6705          KM   SUB-BASIN A03E
6706          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6707          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6708          KM     L =  .87  Kb = .046  Adj. Slope =   48.0
6709          BA    .153
6710          LG    0.22    0.28    3.88    0.56      27
6711          UC   0.442   0.390
6712          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6713          UA     100
              *
              * *** ROUTE RA03E  ************************************************************
              *
              * ROUTE RA03E IS 1517 FT WITH A SLOPE OF .0053
              * CROSS SECTION IS A SMALL NATURAL WASH
              *
              * *** ROUTE FLOW TO CA03B FROM CA03E  **************************
              * DDM   ***** Preserved *****

6714          KK   RA03E
6715          RS       4    FLOW       0
6716          RC    0.05    0.05    0.05    1517   .0053
6717          RX       0     350     450     480     482     510     610     910
6718          RY       7       6       5       1       0       5       6       7
              *
              * DDM   ***** Inserted *****

6719          KK    A03B   BASIN
6720          KM   SUB-BASIN A03B
6721          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6722          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6723          KM     L =  .41  Kb = .057  Adj. Slope =  112.0
6724          BA    .073
6725          LG    0.32    0.33    3.38    0.74       8
6726          UC   0.221   0.151
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6727          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6728          UA     100
              *
              * *** COMBINE BASIN A03B AND RA03E  ****************************************
              *

6729          KK   CA03B
6730          HC       2
              *
              * *** ROUTE RA03B  ************************************************************
              *
              * ROUTE RA03B IS 3103 FT WITH A SLOPE OF .001
              * CROSS SECTION IS A SMALL NATURAL WASH
              *
              * *** ROUTE FLOW TO CA03A FROM CA03B  **************************
              * DDM   ***** Preserved *****
```

```
6731          KK   RA03B
6732          RS      16    FLOW       0
6733          RC    0.05    0.05    0.05    3103    .001
6734          RX       0     350     450     480     482     510     610     910
6735          RY       7       6       5       1       0       5       6       7
              *
              * DDM   ***** Inserted *****

6736          KK    A03A   BASIN
6737          KM   SUB-BASIN A03A
6738          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6739          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6740          KM     L =  .62  Kb = .051  Adj. Slope =   65.0
6741          BA    .141
6742          LG    0.33    0.34    3.71    0.58       4
6743          UC   0.325   0.221
6744          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6745          UA     100
              *
              * *** COMBINE BASIN A03A AND RA03A  ****************************************
              *

6746          KK   CA03A
6747          HC       2
              *
              * *** ROUTE RA03A  ************************************************************
              *
              * ROUTE RA03A IS 1390 FT WITH A SLOPE OF .0029
              * CROSS SECTION IS A SMALL NATURAL WASH
              *
              * *** ROUTE FLOW TO CA03 FROM CA03A  ***************************
              * DDM   ***** Preserved *****
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6748          KK   RA03A
6749          RS       4    FLOW       0
6750          RC    0.05    0.05    0.05    1390  0.0029
6751          RX       0     350     450     480     482     510     610     910
6752          RY       7       6       5       1       0       5       6       7
              *
              * DDM   ***** Inserted *****

6753          KK     A03   BASIN
6754          KM   SUB-BASIN A03
6755          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6756          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
6757          KM     L = 1.01  Kb = .046  Adj. Slope =   17.0
6758          BA    .276
6759          LG    0.32    0.35    3.33    0.72       0
6760          UC   0.917   0.706
6761          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6762          UA     100
              *
              * *** COMBINE BASIN A03, RA03A, AND RA03D  ************************************
              *

6763          KK    CA03
6764          HC       3
              *
              *
              * *** COMBINE THE HYDROGRAPHS TO PREVENT ERROR  **************************
              * *** COMBINE BASINS A99K, A99J, A99I, AND CA03  *************************
              * DDM   ***** Preserved *****

6765          KK  DUMMY5
6766          HC       5
              *
              * DDM   ***** Inserted *****

6767          KK    A99G   BASIN
6768          KM   SUB-BASIN A99G
```

```
6769          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6770          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
6771          KM     L =  .02  Kb = .064  Adj. Slope =  315.0
6772          BA    .022
6773          LG    0.35    0.35    3.45    0.67       0
6774          UC   0.083   0.009
6775          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6776          UA     100
              *
              *
              * *** STORAGE ROUTING LA99G ***********************************************
              * *** GRAVEL PIT STORAGE (ACCOUNTED) ***************************************
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE27

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6777          KK   LA99G
6778          DT  LA99GD     0.8
6779          DI       0     100    1000   10000
6780          DQ       0     100    1000   10000
              *
              *
              *
              * DDM   ***** Inserted *****

6781          KK    A99H   BASIN
6782          KM   SUB-BASIN A99H
6783          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6784          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6785          KM     L =  .73  Kb = .056  Adj. Slope =   10.0
6786          BA    .101
6787          LG    0.35    0.34    2.86    1.05       0
6788          UC   1.192   1.291
6789          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6790          UA     100
              *
              *
              * *** STORAGE ROUTING LA99H ***********************************************
              * *** GRAVEL PIT STORAGE (ACCOUNTED) ***************************************
              * DDM   ***** Preserved *****

6791          KK   LA99H
6792          DT  LA99HD     3.2
6793          DI       0     100    1000   10000
6794          DQ       0     100    1000   10000
              *
              *
              *
              * *** ROUTE RA99H  ************************************************************
              *
              * ROUTE RA99H IS 2235 FT WITH A SLOPE OF .0022
              * CROSS SECTION IS A SMALL NATURAL WASH
              *
              * *** ROUTE FLOW TO CA99F FROM CA99H  ***************************
              * DDM   ***** Preserved *****

6795          KK   RA99H
6796          RS       1    FLOW       0
6797          RC    0.05    0.05    0.05    2235   .0022
6798          RX       0     350     450     480     482     510     610     910
6799          RY       7       6       5       1       0       5       6       7
              *
              * DDM   ***** Inserted *****

6800          KK    A02D   BASIN
6801          KM   SUB-BASIN A02D
6802          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6803          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6804          KM     L =  .02  Kb = .060  Adj. Slope =  315.0
6805          BA    .062
                                           HEC-1 INPUT                                          PAGE273

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
6806          LG    0.36    0.33    2.76    1.14       0
6807          UC   0.083   0.005
6808          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6809          UA     100
              *
              *
              * *** STORAGE ROUTING LA02D ***********************************************
              * *** GRAVEL PIT STORAGE (ACCOUNTED) ***************************************
              * DDM   ***** Preserved *****

6810          KK   LA02D
6811          DT  LA02DD     1.6
6812          DI       0     100    1000   10000
6813          DQ       0     100    1000   10000
              *
              *
              * *** ROUTE RA02D  ************************************************************
              *
              * ROUTE RA02D IS 1098 FT WITH A SLOPE OF .0027
              * CROSS SECTION IS A SMALL NATURAL WASH
              *
              * *** ROUTE FLOW TO CA99F FROM CA02D  ***************************
              * DDM   ***** Preserved *****

6814          KK   RA02D
6815          RS       6    FLOW      0
6816          RC    0.05    0.05    0.05    1098   .0027
6817          RX       0     350     450     480     482     510     610     910
6818          RY       7       6       5       1       0       5       6       7
              *
              * DDM   ***** Inserted *****

6819          KK    A99F   BASIN
6820          KM   SUB-BASIN A99F
6821          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6822          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6823          KM     L =  .69  Kb = .054  Adj. Slope =    6.0
6824          BA    .112
6825          LG    0.35    0.35    2.92    0.98       0
6826          UC   1.362   1.349
6827          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6828          UA     100
              *
              * *** COMBINE BASIN A99F, RA99H, AND RA02D  ***********************************
              *

6829          KK   CA99F
6830          HC       3
              *
              * DDM   ***** Inserted *****
1                                        HEC-1 INPUT                                          PAGE27

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6831          KK     A02   BASIN
6832          KM   SUB-BASIN A02
6833          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6834          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
6835          KM     L =  .04  Kb = .034  Adj. Slope =  315.0
6836          BA    .017
6837          LG    0.10    0.35    2.61    1.15       5
6838          UC   0.200   0.153
6839          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6840          UA     100
              *
              * DDM   ***** Inserted *****

6841          KK    A01H   BASIN
6842          KM   SUB-BASIN A01H
6843          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6844          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6845          KM     L =  .04  Kb = .030  Adj. Slope =  315.0
6846          BA    .069
6847          LG    0.10    0.35    2.97    0.87       5
```

```
6848          UC   0.083   0.008
6849          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6850          UA     100
              *
              *
              * *** STORAGE ROUTING LA01H ***********************************************
              * *** GRAVEL PIT STORAGE (ACCOUNTED) ***************************************
              * DDM   ***** Preserved *****

6851          KK   LA01H
6852          DT  LA01HD     2.4
6853          DI       0     100    1000   10000
6854          DQ       0     100    1000   10000
              *
              *
              *
              * DDM   ***** Inserted *****

6855          KK    A99E   BASIN
6856          KM   SUB-BASIN A99E
6857          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6858          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
6859          KM     L =  .04  Kb = .033  Adj. Slope =  315.0
6860          BA    .024
6861          LG    0.10    0.35    3.64    0.54       5
6862          UC   0.083   0.015
6863          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6864          UA     100
              *
              *
              * *** STORAGE ROUTING LA99E ***********************************************
              * *** GRAVEL PIT STORAGE (ACCOUNTED) ***************************************
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE27
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6865          KK   LA99E
6866          DT  LA99ED     0.8
6867          DI       0     100    1000   10000
6868          DQ       0     100    1000   10000
              *
              *
              *
              * *** COMBINE THE HYDROGRAPHS TO PREVENT ERROR  *************************
              * *** COMBINE BASINS A99G, A02, A01H, A99E, AND CA99F  ******************
              * DDM   ***** Preserved *****

6869          KK  DUMMY6
6870          HC       6
              *
              * DDM   ***** Inserted *****

6871          KK    A99B   BASIN
6872          KM   SUB-BASIN A99B
6873          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6874          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6875          KM     L =  .29  Kb = .031  Adj. Slope =   34.0
6876          BA    .051
6877          LG    0.10    0.35    3.31    0.68       5
6878          UC   0.138   0.062
6879          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6880          UA     100
              *
              * DDM   ***** Inserted *****

6881          KK    A99C   BASIN
6882          KM   SUB-BASIN A99C
6883          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6884          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
6885          KM     L =  .02  Kb = .032  Adj. Slope =  315.0
6886          BA    .028
6887          LG    0.10    0.35    2.63    1.12       5
6888          UC   0.083   0.008
```

```
6889          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6890          UA     100
              *
              *
              * *** STORAGE ROUTING LA99C ***********************************************
              * *** GRAVEL PIT STORAGE (ACCOUNTED) ***************************************
              * DDM   ***** Preserved *****

6891          KK   LA99C
6892          DT  LA99CD     0.8
6893          DI       0     100    1000   10000
6894          DQ       0     100    1000   10000
              *
              *
              *
              * DDM   ***** Inserted *****
1                                          HEC-1 INPUT                                          PAGE27

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6895          KK    A99D   BASIN
6896          KM   SUB-BASIN A99D
6897          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6898          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.000
6899          KM     L =  .02  Kb = .032  Adj. Slope =  315.0
6900          BA    .030
6901          LG    0.10    0.35    3.50    0.59       5
6902          UC   0.083   0.008
6903          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6904          UA     100
              *
              *
              * *** STORAGE ROUTING LA99D ***********************************************
              * *** GRAVEL PIT STORAGE (ACCOUNTED) ***************************************
              * DDM   ***** Preserved *****

6905          KK   LA99D
6906          DT  LA99DD     0.8
6907          DI       0     100    1000   10000
6908          DQ       0     100    1000   10000
              *
              *
              * DDM   ***** Inserted *****

6909          KK    A01A   BASIN
6910          KM   SUB-BASIN A01A
6911          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6912          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6913          KM     L =  .43  Kb = .031  Adj. Slope =   33.0
6914          BA    .051
6915          LG    0.10    0.35    3.25    0.72       5
6916          UC   0.233   0.204
6917          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6918          UA     100
              *
              * *** ROUTE RA01A  ***************************************************************
              *
              * ROUTE RA01A IS 2225 FT WITH A SLOPE OF .0027
              * CROSS SECTION IS A SMALL NATURAL WASH
              *
              * *** ROUTE FLOW TO CA99F FROM CA02D  ***************************
              * DDM   ***** Preserved *****

6919          KK   RA01A
6920          RS      10    FLOW       0
6921          RC    0.05    0.05    0.05    2225   .0027
6922          RX       0     350     450     480     482     510     610     910
6923          RY       7       6       5       1       0       5       6       7
              *
              * DDM   ***** Inserted *****
                                           HEC-1 INPUT                                          PAGE27

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
6924          KK     A01   BASIN
6925          KM   SUB-BASIN A01
6926          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6927          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
6928          KM     L =  .82  Kb = .027  Adj. Slope =   17.0
6929          BA    .202
6930          LG    0.10    0.35    3.21    0.74       5
6931          UC   0.446   0.321
6932          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6933          UA     100
              *
              * *** COMBINE BASIN A01 AND RA01A  ********************************
              * DDM   ***** Preserved *****

6934          KK    CA01
6935          HC       2
              *
              *
              * DDM   ***** Inserted *****

6936          KK    A99A   BASIN
6937          KM   SUB-BASIN A99A
6938          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6939          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6940          KM     L =  .02  Kb = .028  Adj. Slope =  315.0
6941          BA    .126
6942          LG    0.08    0.23    2.71    1.02      36
6943          UC   0.179   0.066
6944          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6945          UA     100
              *
              *
              * *** STORAGE ROUTING LA99A ********************************************
              * *** GRAVEL PIT STORAGE (ACCOUNTED) ************************************
              * DDM   ***** Preserved *****

6946          KK   LA99A
6947          DT  LA99AD     7.2
6948          DI       0     100    1000   10000
6949          DQ       0     100    1000   10000
              *
              *
              * DDM   ***** Inserted *****

6950          KK     A99   BASIN
6951          KM   SUB-BASIN A99
6952          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6953          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
6954          KM     L =  .66  Kb = .028  Adj. Slope =   17.0
6955          BA    .135
6956          LG    0.10    0.35    2.64    1.11       5
6957          UC   0.429   0.325
6958          UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6959          UA     100
              *
              *
              * *** COMBINE THE HYDROGRAPHS TO PREVENT ERROR  *************************
              * *** COMBINE BASINS A99A, A99, A01H, A99E, AND CA99F  ******************
              * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                          PAGE278

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6960          KK  DUMMY7
6961          HC       7
              *
              * DDM   ***** Inserted *****

6962          KK    A01E   BASIN
6963          KM   SUB-BASIN A01E
6964          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6965          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .999
6966          KM     L =  .51  Kb = .029  Adj. Slope =   41.0
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```
6967          BA     .083
6968          LG     0.14    0.28    4.45    0.45      56
6969          UC    0.221   0.167
6970          UA        0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
6971          UA      100
              *
              *
              * *** DIVERSION DA01E ***********************************************************
              * DIVERSION AT OF GLENDALE AVE(SPLIT) / GLEN HARBOR (MAIN)
              * DDM    ***** Preserved *****

6972          KK   DA01E
6973          DT   A01EI
6974          DI        0       1     100     300     500     600     700     900    1100
6975          DQ        0      .6      60     180     300     360     420     540     660
              *
              * *** ROUTE RA01ES  ***********************************************************
              *
              * ROUTE RA01ES IS 7579 FT WITH A SLOPE OF .0046
              * CROSS SECTION IS A RURAL ROAD
              *
              * *** ROUTE FLOW TO CN01 FROM CA01E  ***************************
              * DDM    ***** Preserved *****

6976          KK  RA01ES
6977          RS       31    FLOW       0
6978          RC     0.04    0.03    0.04    7579   .0046
6979          RX        0     350     400     480     580     660     710     910
6980          RY        7       6       5       3       3       5       6       7
              *
              * DDM    ***** Inserted *****

6981          KK    N01A   BASIN
6982          KM   SUB-BASIN N01A
6983          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
6984          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .995
6985          KM     L =  .97  Kb = .025  Adj. Slope =   14.0
6986          BA     .412
6987          LG     0.10    0.35    3.17    0.76       6
6988          UC    0.525   0.293
6989          UA        0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
6990          UA      100
              *
              * *** ROUTE RN01A  ***********************************************************
              *
              * ROUTE RN01A IS 2337 FT WITH A SLOPE OF .0030
              * CROSS SECTION IS A RURAL ROAD
              *
              * *** ROUTE FLOW TO CN01 FROM CN01A  ***************************
              * DDM    ***** Preserved *****
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6991          KK   RN01A
6992          RS        8    FLOW       0
6993          RC     0.04    0.03    0.04    2337   .0030
6994          RX        0     350     400     480     530     610     660     910
6995          RY        7       6       5       3       3       5       6       7
              *
              * DDM    ***** Inserted *****

6996          KK     N01   BASIN
6997          KM   SUB-BASIN N01
6998          KM   6-HOUR RAINFALL, PATTERN NO. 1.15 WAS USED TO FIND TC & R FOR THIS BASIN
6999          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .992
7000          KM     L = 1.65  Kb = .024  Adj. Slope =   29.0
7001          BA     .648
7002          LG     0.13    0.29    4.00    0.54      37
7003          UC    0.517   0.340
7004          UA        0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
7005          UA      100
              *
              *
```

```
                 * *** COMBINE BASIN N01, RN01A, AND RAOLES  ********************************
                 * DDM   ***** Preserved *****

7006             KK    CN01
7007             HC       3
                 *
                 * DDM   ***** Inserted *****

7008             KK    A03C   BASIN
7009             KM   SUB-BASIN A03C
7010             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
7011             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
7012             KM     L =  .85  Kb = .045  Adj. Slope =   32.0
7013             BA    .326
7014             LG    0.26    0.26    4.25    0.50      23
7015             UC   0.496   0.283
7016             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
7017             UA     100
                 *
                 * *** ROUTE RA03C  ************************************************************
                 *
                 * ROUTE RA03C IS 4511 FT WITH A SLOPE OF .0299
                 * CROSS SECTION IS A SMALL NATURAL WASH
                 *
                 * *** ROUTE FLOW TO CA02A* FROM CA03C  ***************************
                 * DDM   ***** Preserved *****

7018             KK   RA03C
7019             RS       5    FLOW       0
7020             RC    0.05    0.05    0.05    4511   .0299
7021             RX       0     350     450     480     482     510     610     910
7022             RY       7       6       5       1       0       5       6       7
                 *
                 * DDM   ***** Inserted *****
1                                                HEC-1 INPUT                                    PAGE28(

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


7023             KK    A02B   BASIN
7024             KM   SUB-BASIN A02B
7025             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
7026             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
7027             KM     L =  .49  Kb = .048  Adj. Slope =   88.0
7028             BA    .271
7029             LG    0.27    0.29    4.10    0.50      24
7030             UC   0.233   0.087
7031             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
7032             UA     100
                 *
                 * *** ROUTE RA02B  ************************************************************
                 *
                 * ROUTE RA02B IS 1060 FT WITH A SLOPE OF .0047
                 * CROSS SECTION IS A SMALL NATURAL WASH
                 *
                 * *** ROUTE FLOW TO CA02A* FROM CA02B  ***************************
                 * DDM   ***** Preserved *****

7033             KK   RA02B
7034             KO       3
7035             RS       2    FLOW       0
7036             RC    0.05    0.05    0.05    1060   .0047
7037             RX       0     350     450     480     482     510     610     910
7038             RY       7       6       5       1       0       5       6       7
                 *
                 *
                 *
                 * *** COMBINE RA03C AND RA02B  *********************************
                 * DDM   ***** Preserved *****

7039             KK  CA02A*
7040             HC       2
                 *
                 * *** ROUTE RA02A*   ********************************************
                 *
```

```
                * ROUTE RA02A* IS 2274 FT WITH A SLOPE OF .0031
                * CROSS SECTION IS A SMALL NATURAL WASH
                *
                * *** ROUTE FLOW TO CA02A FROM CA02A*  ***************************
                * DDM   ***** Preserved *****

7041            KK  RA02A*
7042            RS       5    FLOW       0
7043            RC    0.05    0.05    0.05    2274  0.0031
7044            RX       0     100     300     360     380     420     620     720
7045            RY      10       8       6       2       0       6       8      10
                *
                *
                * DDM   ***** Inserted *****
1                                          HEC-1 INPUT                                                    PAGE28

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


7046            KK    A02A   BASIN
7047            KM   SUB-BASIN A02A
7048            KM   6-HOUR RAINFALL, PATTERN NO. 1.11 WAS USED TO FIND TC & R FOR THIS BASIN
7049            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .992
7050            KM     L = 1.16  Kb = .059  Adj. Slope =   22.0
7051            BA    .605
7052            LG    0.33    0.16    3.95    0.60       4
7053            UC   1.017   0.565
7054            UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
7055            UA     100
                *
                * DDM   ***** Inserted *****

7056            KK    A01G   BASIN
7057            KM   SUB-BASIN A01G
7058            KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
7059            KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
7060            KM     L =  .02  Kb = .027  Adj. Slope =  315.0
7061            BA    .185
7062            LG    0.10    0.32    4.00    0.48      21
7063            UC   0.083   0.003
7064            UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
7065            UA     100
                *
                *
                * *** STORAGE ROUTING LA01G ***********************************************
                * *** GRAVEL PIT STORAGE (ACCOUNTED) ***************************************
                * DDM   ***** Preserved *****

7066            KK   LA01G
7067            DT  LA01GD     9.6
7068            DI       0     100    1000   10000
7069            DQ       0     100    1000   10000
                *
                *
                * *** COMBINE BASIN A02A, A01G, AND RA02A*    ******************************
                * DDM   ***** Preserved *****

7070            KK   CA01G
7071            HC       3
                *
                *
                * *** ROUTE RA01G   *******************************************
                *
                * ROUTE RA01G IS DUMMY ROUTE
                * ENTERS A SAND AND GRAVEL PIT
                *
                * *** ROUTE FLOW TO CA01C FROM A01G   ***************************
                * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE282

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


7072            KK   RA01G
7073            RS       1    FLOW       0
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```
7074          RC    0.05    0.05    0.05    1000    .001
7075          RX       0     100     300     360     380     420     620     720
7076          RY      10       8       6       2       0       6       8      10
              *
              * DDM   ***** Inserted *****

7077          KK    A02C   BASIN
7078          KM   SUB-BASIN A02C
7079          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
7080          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
7081          KM     L = 1.03  Kb = .038  Adj. Slope =   22.0
7082          BA    .333
7083          LG    0.18    0.29    4.60    0.35      24
7084          UC   0.600   0.402
7085          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
7086          UA     100
              *
              *
              * *** STORAGE ROUTING LA02C ***********************************************
              * *** GRAVEL PIT STORAGE (ACCOUNTED) ***************************************
              * DDM   ***** Preserved *****

7087          KK   LA02C
7088          DT  LA02CD    12.7
7089          DI       0     100    1000   10000
7090          DQ       0     100    1000   10000
              *
              *
              * *** ROUTE RA02C   ******************************************
              *
              * ROUTE RA02C IS 5468 FT WITH A SLOPE OF .0033
              * CROSS SECTION IS A SMALL NATURAL WASH
              *
              * *** ROUTE FLOW TO CA01F FROM A02C   **************************
              * DDM   ***** Preserved *****

7091          KK   RA02C
7092          KO       3
7093          RS      16    FLOW       0
7094          RC    0.05    0.05    0.05    5468   .0033
7095          RX       0     350     450     480     482     510     610     910
7096          RY       7       6       5       1       0       5       6       7
              *
              * DDM   ***** Inserted *****

7097          KK    A01F   BASIN
7098          KM   SUB-BASIN A01F
7099          KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
7100          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .996
7101          KM     L = 1.09  Kb = .036  Adj. Slope =   39.0
7102          BA    .281
7103          LG    0.17    0.30    4.30    0.42      26
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7104          UC   0.463   0.348
7105          UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
7106          UA     100
              *
              *
              * *** STORAGE ROUTING LA01F ***********************************************
              * *** COUNTRY MEADOWS RESIDENTIAL DEVELOPMENT STORAGE (ACCOUNTED) *********
              * DDM   ***** Preserved *****

7107          KK   LA01F
7108          DT  LA01FD     6.6
7109          DI       0     100    1000   10000
7110          DQ       0     100    1000   10000
              *
              *
              *
              * *** COMBINE BASIN A01F AND RA02C    ******************************
              * DDM   ***** Preserved *****
```

```
7111        KK   CA01F
7112        HC       2
            *
            *
            * *** ROUTE RA01F   ********************************************
            *
            * ROUTE RA01F IS 2986 FT WITH A SLOPE OF .0087
            * CROSS SECTION IS A SMALL NATURAL WASH
            *
            * *** ROUTE FLOW TO CA01D FROM CA01F   ***************************
            * DDM   ***** Preserved *****

7113        KK   RA01F
7114        RS       6    FLOW       0
7115        RC    0.05    0.05    0.05    2986   .0087
7116        RX       0     350     450     480     482     510     610     910
7117        RY       7       6       5       1       0       5       6       7
            *
            * DDM   ***** Inserted *****

7118        KK    A01D   BASIN
7119        KM   SUB-BASIN A01D
7120        KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
7121        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
7122        KM     L =  .77  Kb = .027  Adj. Slope =   48.0
7123        BA    .211
7124        LG    0.11    0.31    4.30    0.43      31
7125        UC   0.258   0.162
7126        UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
7127        UA     100
            *
            *
            * *** STORAGE ROUTING LA01D ***********************************************
            * *** LIGHT INDUSTRIAL DEVELOPMENT STORAGE (ACCOUNTED) ********************
            * DDM   ***** Preserved *****
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


7128        KK   LA01D
7129        DT  LA01DD    12.8
7130        DI       0     100    1000   10000
7131        DQ       0     100    1000   10000
            *
            * *** DIVERSION RECOVER DRA01E  ***********************************************
            * *** RECOVER DIVERTED FLOW FROM CA01E ****************************************
            * DDM   ***** Preserved *****

7132        KK  DRA01E
7133        DR   A01EI
            *
            *
            * *** ROUTE RA01EW   ********************************************
            *
            * ROUTE RA01EW IS 1434 FT WITH A SLOPE OF .0126
            * CROSS SECTION IS A SMALL NATURAL WASH
            *
            * *** ROUTE FLOW TO CA01D FROM CA01F   ***************************
            * DDM   ***** Preserved *****

7134        KK  RA01EW
7135        RS       3    FLOW       0
7136        RC    0.05    0.05    0.05    1434   .0126
7137        RX       0     350     450     480     482     510     610     910
7138        RY       7       6       5       1       0       5       6       7
            *
            *
            * *** COMBINE BASIN A01D, RA01F, AND RA01EW   ************************
            * DDM   ***** Preserved *****

7139        KK   CA01D
7140        HC       3
            *
            * *** ROUTE RA01D   ********************************************
```

```
                 *
                 * ROUTE RA01D IS 2541 FT WITH A SLOPE OF .0012
                 * CROSS SECTION IS A SMALL NATURAL WASH (MEASURED)
                 *
                 * *** ROUTE FLOW TO CA01C FROM CA01D   ***************************
                 * DDM   ***** Preserved *****

7141             KK  RA01D
7142             KO       3
7143             RS       5    FLOW       0
7144             RC    0.05     .04    0.05    2541   .0012
7145             RX       0     350     450     470     490     510     610     910
7146             RY       7       6       5       0       0       5       6       7
                 *
                 * DDM   ***** Inserted *****
1                                          HEC-1 INPUT                                                    PAGE28
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7147             KK    A01C   BASIN
7148             KM   SUB-BASIN A01C
7149             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
7150             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .997
7151             KM     L =  .69  Kb = .027  Adj. Slope =   14.0
7152             BA    .221
7153             LG    0.10    0.26    3.53    0.85      60
7154             UC   0.371   0.216
7155             UA       0     5.0    16.0    30.0    65.0    77.0    84.0    90.0    94.0    97.0
7156             UA     100
                 *
                 *
                 * *** STORAGE ROUTING LA01C ***********************************************
                 * *** GRAVEL PIT STORAGE (ACCOUNTED) ***************************************
                 * DDM   ***** Preserved *****

7157             KK   LA01C
7158             DT  LA01CD    15.2
7159             DI       0     100    1000   10000
7160             DQ       0     100    1000   10000
                 *
                 *
                 * DDM   ***** Inserted *****

7161             KK    A01B   BASIN
7162             KM   SUB-BASIN A01B
7163             KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
7164             KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .998
7165             KM     L =  .39  Kb = .028  Adj. Slope =   36.0
7166             BA    .149
7167             LG    0.10    0.35    2.95    0.89       6
7168             UC   0.208   0.090
7169             UA       0     3.0     5.0     8.0    12.0    20.0    43.0    75.0    90.0    96.0
7170             UA     100
                 *
                 *
                 * *** STORAGE ROUTING LA01B ***********************************************
                 * *** GRAVEL PIT STORAGE (ACCOUNTED) ***************************************
                 * DDM   ***** Preserved *****

7171             KK   LA01B
7172             DT  LA01BD     4.8
7173             DI       0     100    1000   10000
7174             DQ       0     100    1000   10000
                 *
                 *
                 * *** COMBINE BASIN A01C, A01B , RA01G, AND RA01D   ************************
                 * DDM   ***** Preserved *****
1                                          HEC-1 INPUT                                                    PAGE286
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7175             KK   CA01B
7176             HC       4
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                    *
7177                ZZ
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1
                SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

 NO.       (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

  42         N21K
             .
             .
  53         .-------> N21KI*
  52      DN21KL
             .
             .
  57         .------->  N21KI
  56      DN21KO
             V
             V
  60      RN21KS
             .
             .
  65         .        N21I
             .           .
             .           .
  76         .           .-------> LN21ID
  75         .       LN21I
             .           .
             .           .
  79      CN21I*...........
             .
             .
  81         .        N21J
             .           .
             .           .
  92         .           .          .<-------  N21KI*
  91         .           .      DR21K*
             .           .          V
             .           .          V
  93         .           .       LN21K
             .           .          .
             .           .          .
 100         .           .          .          .<-------   N21KI
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 99          .           .           .      DRN21K
             .           .           .           V
             .           .           .           V
101          .           .           .      RN21KE
             .           .           .           .
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106          .       CN21J.......................
             .           .
             .           .
109          .           .-------->   N21JI
108          .      DN21JO
             .           V
             .           V
112          .      RN21JS
             .           .
             .           .
117          .           .        N21Z
             .           .           .
             .           .           .
128          .           .           .-------->  LN21ZD
127          .           .       LN21Z
             .           .           .
             .           .           .
131          .       CN21Z............
             .           .
             .           .
134          .           .-------->   N21ZI
133          .      DN21ZO
             .           .
             .           .
138          .           .-------->  N21ZI*
137          .      DN21Z*
             .           V
             .           V
141          .      RN21ZW
             .           .
             .           .
146          .           .        N11P
             .           .           V
             .           .           V
156          .           .       RN11P
             .           .           .
             .           .           .
161          .           .           .        N11L
             .           .           .           .
             .           .           .           .
171          .           .       CN11L............
             .           .           .
             .           .           .
174          .           .           .-------->   N11LI
173          .           .       DN11L
             .           .           V
             .           .           V
177          .           .      RN11LE
             .           .           .
             .           .           .
182      CN21I........................
             V
             V
184      RN21I
             .
             .
189          .       N22B
             .           .
             .           .
200          .           .-------->   N22BI
199          .       DN22B
             .           V
             .           V
203          .      RN22BE
             .           .
             .           .
208          .           .        N21F
             .           .           .
             .           .           .
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218       CN21F.......................
              V
              V
220       RN21F
              .
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225           .        N21G
              .           .
              .           .
236           .           .           .<-------  N21ZI*
235           .           .      DR21Z*
              .           .           V
              .           .           V
237           .           .      RN21ZS
              .           .           .
              .           .           .
242           .       CN21G............
              .           .
              .           .
245           .           .------->   N21GI
244           .      DN21GO
              .           V
              .           V
248           .      RN21GS
              .           .
              .           .
253           .           .        N21E
              .           .           .
              .           .           .
263       CN21E.......................
              V
              V
265       RN21E
              .
              .
270           .        N21D
              .           .
              .           .
281           .           .------->  LN21DD
280           .       LN21D
              .           .
              .           .
285           .           .           .<-------   N22BI
284           .           .      N22BIX
              .           .           V
              .           .           V
286           .           .      RN22BS
              .           .           .
              .           .           .
291           .           .           .        N22A
              .           .           .           .
              .           .           .           .
301           .           .       CN22A............
              .           .           .
              .           .           .
304           .           .           .------->   N22AI
303           .           .       DN22A
              .           .           V
              .           .           V
307           .           .      RN22AE
              .           .           .
              .           .           .
312       CN21D.......................
              .
              .
315           .------->   N21DI
314       DN21D
              V
              V
318      RN21DS
              .
              .
 23           .        N21C
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334          .           .-------> LN21CD
333          .       LN21C
             .           .
             .           .
337      CN21C............
             V
             V
339      RN21C
             .
             .
344          .        N24Q
             .           V
             .           V
354          .       RN24Q
             .           .
             .           .
359          .           .        N24R
             .           .           V
             .           .           V
369          .           .       RN24R
             .           .           .
             .           .           .
374          .           .           .        N24O
             .           .           .           .
             .           .           .           .
384          .       CN24O.......................
             .           V
             .           V
386          .       RN24O
             .           .
             .           .
391          .           .        N24S
             .           .           V
             .           .           V
401          .           .       RN24S
             .           .           .
             .           .           .
406          .           .           .        N24T
             .           .           .           V
             .           .           .           V
416          .           .           .       RN24T
             .           .           .           .
             .           .           .           .
421          .           .           .           .        N24P
             .           .           .           .           .
             .           .           .           .           .
431          .       CN24P..................................
             .           V
             .           V
433          .       RN24P
             .           .
             .           .
438          .           .        N24U
             .           .           V
             .           .           V
448          .           .       RN24U
             .           .           .
             .           .           .
453          .      CN24U*............
             .           V
             .           V
455          .      RN24U*
             .           .
             .           .
460          .           .        N24V
             .           .           V
             .           .           V
470          .           .       RN24V
             .           .           .
             .           .           .
475          .      CN24V*............
             .           V
             .           V
477          .      RN24V*
             .           .
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482                 N24M
                      .
                      .
492          CN24M............
                 V
                 V
494          RN24M
                 .
                 .
499                 N24L
                      V
                      V
509                RN24L
                      .
                      .
514       CN24I*............
                 V
                 V
516       RN24I*
                 .
                 .
521                 N24I
                      .
                      .
531                      .        N24H
                         .          .
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541                      .          .        N24N
                         .          .           V
                         .          .           V
551                      .          .       RN24N
                         .          .           .
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556                      .          .           .        N24J
                         .          .           .           .
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566                      .          .       CN24J............
                         .          .           V
                         .          .           V
568                      .          .       RN24J
                         .          .           .
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573                      .          .           .        N24K
                         .          .           .           .
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583          CN24I..............................................
                 V
                 V
586          RN24I
                 .
                 .
593                      .<-------   N21JI
592                 DRN21J
                      V
                      V
594                 RN21JE
                      .
                      .
599       CN24G*............
                 V
                 V
601       RN24G*
                 .
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606                 N24G
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617                      .------->  LN24GD
616                LN24G
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620          CN24G............
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623          .           .           .<-------   N21ZI
622          .           .      DRN21Z
             .           .           V
             .           .           V
624          .           .      RN21ZE
             .           .           .
             .           .           .
629          .      CN24G+............
             .           V
             .           V
631          .       RN24G
             .           .
             .           .
636          .           .        N24F
             .           .           .
             .           .           .
646          .       CN24F............
             .           .
             .           .
648          .           .        N24D
             .           .           .
             .           .           .
658          .       CN24D............
             .           V
             .           V
660          .       LN24D
             .           .
             .           .
666          .           .        N21H
             .           .           .
             .           .           .
677          .           .           .           .<-------   N21GI
676          .           .           .      DRN21G
             .           .           .           V
             .           .           .           V
678          .           .           .      RN21GE
             .           .           .           .
             .           .           .           .
683          .           .      CN21H............
             .           .           V
             .           .           V
686          .           .      RN21H
             .           .           .
             .           .           .
691          .           .           .        N24E
             .           .           .           V
             .           .           .           V
701          .           .           .       RN24E
             .           .           .           .
             .           .           .           .
707          .      CN24D*......................
             .           .
             .           .
709          .           .       N27F
             .           .           V
             .           .           V
719          .           .      RN27F
             .           .           .
             .           .           .
724          .           .           .        N27G
             .           .           .           .
             .           .           .           .
734          .           .      CN27G............
             .           .           V
             .           .           V
736          .           .      RN27G
             .           .           .
             .           .           .
741          .           .           .        N27E
             .           .           .           V
             .           .           .           V
751          .           .           .       RN27E
             .           .           .           .
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756          .           .           .           .        N27H
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                 .         .         .         .         V
                 .         .         .         .         V
766              .         .         .         .      RN27H
                 .         .         .         .         .
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771              .         .         .         .         .       N27C
                 .         .         .         .         .         .
                 .         .         .         .         .         .
781              .         .      CN27C.......................................
                 .         .         V
                 .         .         V
783              .         .      RN27C
                 .         .         .
                 .         .         .
788              .         .         .      N27I
                 .         .         .         V
                 .         .         .         V
798              .         .         .     RN27I
                 .         .         .         .
                 .         .         .         .
803              .         .         .         .      N27B
                 .         .         .         .         .
                 .         .         .         .         .
813              .         .         .         .         .       N27J
                 .         .         .         .         .         .
                 .         .         .         .         .         .
824              .         .         .         .         .         .-------->   N27JI
823              .         .         .         .         .     DN27J
                 .         .         .         .         .         V
                 .         .         .         .         .         V
827              .         .         .         .         .    RN27JW
                 .         .         .         .         .         .
                 .         .         .         .         .         .
832              .         .      CN27B.......................................
                 .         .         V
                 .         .         V
834              .         .      RN27B
                 .         .         .
                 .         .         .
839              .         .         .      N27D
                 .         .         .         .
                 .         .         .         .
850              .         .         .         .-------->  LN27DD
849              .         .         .     LN27D
                 .         .         .         .
                 .         .         .         .
854              .         .         .         .         .<-------   N27JI
853              .         .         .         .    DRN27J
                 .         .         .         .         V
                 .         .         .         .         V
855              .         .         .         .    RN27JS
                 .         .         .         .         .
                 .         .         .         .         .
860              .         .         .     CN27D............
                 .         .         .         .
                 .         .         .         .
863              .         .         .         .-------->   N27DI
862              .         .         .    DN27DO
                 .         .         .         V
                 .         .         .         V
866              .         .         .    RN27DW
                 .         .         .         .
                 .         .         .         .
873              .         .         .         .         .<-------   N27DI
872              .         .         .         .    DRN27D
                 .         .         .         .         V
                 .         .         .         .         V
874              .         .         .         .    RN27DS
                 .         .         .         .         .
                 .         .         .         .         .
879              .         .         .         .         .       N27K
                 .         .         .         .         .         V
                 .         .         .         .         .         V
889              .         .         .         .         .      RN27K
                 .         .         .         .         .         .
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 894                                                          N27L
                                                               .
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 904                                                     CN27L............
                                                             V
                                                             V
 906                                                     RN27L
                                                               .
                                                               .
 911                                                          N25S
                                                                V
                                                                V
 921                                                         RN25S
                                                               .
                                                               .
 926                                                     CN25O*...........
                                                             V
                                                             V
 928                                                     RN25O*
                                                               .
                                                               .
 933                                                          N25O
                                                               .
                                                               .
 944                                                           .-------> LN25OD
 943                                                         LN25O
                                                               .
                                                               .
 947                                                     CN25O............
                                                             V
                                                             V
 949                                                     RN25O
                                                               .
                                                               .
 954                 CN27*...................................
                         .
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 956                         N27
                             .
                             .
 966                             N27A
                                     .
                                     .
 976                                     N26B
                                             .
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 987                                         .-------> LN26BD
 986                                     LN26B
                                             .
                                             .
 990                 CN27....................................
                        V
                        V
 992                 RN27
                         .
                         .
 997                         N26
                             .
                             .
1007                             N26A
                                     .
                                     .
1018                                 .-------> LN26AD
1017                             LN26A
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                                     .
1021                 CN26*......................
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1023                         N25R
                                V
                                V
1033                         RN25R
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1038                                  N25Q
                                         V
                                         V
 048                                  RN25Q
                                         .
                                         .
1053                                     .        N25P
                                         .           V
                                         .           V
1063                                     .       RN25P
                                         .           .
                                         .           .
1069                                     .           .        N25M
                                         .           .           .
                                         .           .           .
1080                                     .           .           .-------> LN25MD
1079                                     .           .       LN25M
                                         .           .           .
                                         .           .           .
1083                            CN25M.....................................
                                         .
                                         .
1086                                     .-------> N25MI
1085                            DN25M
                                     V
                                     V
1089                           RN25MW
                                         .
                                         .
1094                                     .        N25N
                                         .           .
                                         .           .
1105                                     .           .-------> LN25ND
1104                                     .       LN25N
                                         .           V
                                         .           V
 108                                     .       RN25N
                                         .           .
                                         .           .
 113                              CX3............
                                         .
                                         .
1117                                     .-------> X3I
1115                             DX3O
                                     V
                                     V
1120                             RX3W
                                         .
                                         .
1125                        CN26............
                                V
                                V
1127                        RN26
                                .
                                .
1132                             N25L
                                         .
                                         .
1143                                     .-------> N25LI
1142                            DN25L
                                     V
                                     V
1146                           RN25LW
                                         .
                                         .
1151                                     .        N25K
                                         .           .
                                         .           .
1161                            CN25K............
                                         .
                                         .
 .64                                     .-------> N25KI
 163                            DN25K
                                     V
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                    .         .         .         V
1167                .         .         .     RN25KW
                    .         .         .         .
                    .         .         .         .
172                 .         .         .         .        N25J
                    .         .         .         .         .
                    .         .         .         .         .
1182                .         .     CN25J.......................
                    .         .         V
                    .         .         V
1184                .         .     RN25J
                    .         .         .
                    .         .         .
1189                .         .         .       N25G
                    .         .         .         .
                    .         .         .         .
1200                .         .         .         .            .<-------   N25KI
1199                .         .         .         .      DRN25K
                    .         .         .         .           V
                    .         .         .         .           V
1201                .         .         .         .      RN25KS
                    .         .         .         .         .
                    .         .         .         .         .
1206                .         .         .       CN25G............
                    .         .         .           V
                    .         .         .           V
1208                .         .         .       RN25G
                    .         .         .           .
                    .         .         .           .
1213                .         .         .         .        N25I
                    .         .         .         .         .
                    .         .         .         .         .
1223                .         .     CN25I.......................
                    .         .         V
                    .         .         V
1225                .         .     RN25I
                    .         .         .
                    .         .         .
31                  .         .         .       N25E
                    .         .         .         .
                    .         .         .         .
1242                .         .         .         .            .<-------   N25MI
1241                .         .         .         .      DRN25M
                    .         .         .         .           V
                    .         .         .         .           V
1243                .         .         .         .      RN25MS
                    .         .         .         .         .
                    .         .         .         .         .
1249                .         .         .         .         .           .<-------     X3I
1248                .         .         .         .         .        DRX3
                    .         .         .         .         .           V
                    .         .         .         .         .           V
1250                .         .         .         .         .        RX3S
                    .         .         .         .         .           .
                    .         .         .         .         .           .
1255                .         .         .       CN25E.......................
                    .         .         .         .
                    .         .         .         .
1258                .         .         .         .------->   N25EI
1257                .         .         .       DN25E
                    .         .         .           V
                    .         .         .           V
1261                .         .         .      RN25EW
                    .         .         .         .
                    .         .         .         .
1266                .         .         .         .        N25F
                    .         .         .         .         .
                    .         .         .         .         .
1277                .         .         .         .         .           .<-------   N25LI
1276                .         .         .         .         .      DRN25L
                    .         .         .         .         .           V
                    .         .         .         .         .           V
78                  .         .         .         .         .      RN25LS
                    .         .         .         .         .           .
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1283                                CN25F.......................
                                        V
                                        V
1285                                RN25F
                                        .
                                        .
1290                                    .        N25D
                                        .           .
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1301                                    .           .           .<-------   N25EI
1300                                    .           .      DRN25E
                                        .           .           V
                                        .           .           V
1302                                    .           .      RN25ES
                                        .           .           .
                                        .           .           .
1307                                    .       CN25D............
                                        .           .
                                        .           .
1310                                    .           .-------->   N25DI
1309                                    .       DN25D
                                        .           V
                                        .           V
1313                                    .      RN25DW
                                        .           .
                                        .           .
1318                                    .           .        N25C
                                        .           .           .
                                        .           .           .
1328                                    .       CN25C............
                                        .           .
                                        .           .
1331                                    .           .-------->   N25CI
1330                                    .       DN25C
                                        .           V
                                        .           V
1334                                    .      RN25CW
                                        .           .
                                        .           .
1339                                    .           .        N25B
                                        .           .           .
                                        .           .           .
1349                                CN25B.......................
                                        .
                                        .
1352                                    .-------->   N25BI
1351                                DN25B
                                        V
                                        V
1355                               RN25BW
                                        .
                                        .
1360                                    .        N25A
                                        .           .
                                        .           .
1370                                CN25A............
                                        .
                                        .
1373                                    .-------->   N25AI
1372                                DN25A
                                        .
                                        .
1376                                    .         N25
                                        .           .
                                        .           .
1386                                    .           .        N25H
                                        .           .           .
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1396                            CN25....................................
                                   V
                                   V
1398                            RN25
                                   .
                                   .
1403                                N24B
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1414                                                  .<-------   N25DI
1413                                            DRN25D
                                                     V
                                                     V
 415                                            RN25DS
                                                     .
                                                     .
1420                                      CN24B............
                                               V
                                               V
1422                                      RN24B
                                               .
                                               .
1428                                                  .<-------   N25CI
1427                                            DRN25C
                                                     V
                                                     V
1429                                            RN25CS
                                                     .
                                                     .
1434                                      CN24B*...........
                                               .
                                               .
1437                                           .------->   N24BI
1436                                      DN24B*
                                               V
                                               V
1440                                      RN24BW
                                               .
                                               .
1446                                                  .<-------   N25BI
1445                                            DRN25B
                                                     V
                                                     V
1447                                            RN25BS
                                                     .
                                                     .
 452                                      CN24C*...........
                                               V
                                               V
1454                                      RN24C*
                                               .
                                               .
1460                                                  .<-------   N25AI
1459                                            DRN25A
                                                     V
                                                     V
1461                                            RN25AS
                                                     .
                                                     .
1466                                                 .       N24C
                                                     .          .
                                                     .          .
1476                                      CN24C.......................
                                               V
                                               V
1478                                      RN24C
                                               .
                                               .
1483                                          N24
                                                 .
                                                 .
1493                                                 .        N24A
                                                     .          .
                                                     .          .
1504                                                 .          .-------> LN24AD
1503                                                 .       LN24A
                                                     .          .
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 508                                                 .          .          .<-------   N24BI
 07                                                  .          .      DRN24B
                                                     .          .          V
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1509                                                                  RN24BS
                                                                         .
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1514                                                                     .        A21A
                                                                         .           V
                                                                         .           V
1524                                                                     .       RA21A
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1529                                                                  X30............
                                                                         .
                                                                         .
1532                                                                     .-------->    X30I
1531                                                                DX30
                                                                       V
                                                                       V
1535                                                                RX30W
                                                                         .
                                                                         .
1541                  CN24.......................................................
                         V
                         V
1543                  RN24
                         .
                         .
1549                     .<-------    X30I
1548                  DRX30
                         V
                         V
1550                  RX30S
                         .
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1555                     .        N23A
                         .           .
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1566                     .           .-------->  LN23AD
1565                     .       LN23A
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1569                  CN23A............
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1572                     .-------->   N23AI
1571                  DN23A
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1597                  CN23.................................
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1599                  RN23
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1604                     .        A21C
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1624                     .       RA21C
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1629                     .        A21D
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1849                                  A21JRR
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1887                              .        A21O
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1909                              .        A21U
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1920                              .           .-------> A21UR
1919                              .       LA21U
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1923                          CA21U...........
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1940                              .-------> DA21US
1939                          DA21U
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2251                                                A21V
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2300                                  A21RRR
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2320                                  CA21S............
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2322                                  A21SRR
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2332                                                A21T
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2342                                  CA21T............
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2344                                  A21TRR
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2357                                  RA21T
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2360                                            A21AE
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2371                                                  .-------->  A21AER
2370                                            LA21AE
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2374                                                      .       A21AF
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2385                                                      .           .-------->  A21AFR
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2384                                                  LA21AF
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2388                                                    .        A21X
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 399                                                    .          .-------> A21XR
2398                                                    .       LA21X
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2402                                                    .          .        A21W
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2413                                                    .          .          .-------> A21WR
2412                                                    .          .       LA21W
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2416                                  CA21AE.............................................
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2418                                        A21Y
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2429                                              .-------> A21YR
2428                                        LA21Y
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2432                                              .        A21Z
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2443                                              .          .-------> A21ZR
2442                                              .       LA21Z
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2446                                              .       RA21Z
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2451                                              .          .       A21AB
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2462                                              .          .          .-------> A21ABR
2461                                              .          .      LA21AB
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2481                                              .          .-------> A21ACR
2480                                              .       LA21AC
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2484                                              .          .       A21AA
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2495                                              .          .          .-------> A21AAR
2494                                              .          .      LA21AA
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2498                                              .          .          .       A21AD
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2509                                              .          .          .          .-------> A21ADR
2508                                              .          .          .      LA21AD
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 512                                        CA21AD.....................................
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2514                                        RA21AD
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3021          .      CN11M.................................
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3024          .          .-------->  N11MI
3023          .      DN11M
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3027          .     RN11MS
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3032          .          .        N11K
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3043          .          .          .-------->  LN11KD
3042          .          .      LN11K
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3047          .          .          .          .<--------  N11NI
3046          .          .          .     DRN11N
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3048          .          .          .     RN11NS
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3053          .          .      CN11K............
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3056          .          .          .-------->  N11KI
3055          .          .      DN11K
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3059          .          .     RN11KW
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3075          .          .          .          .-------->  LN11JD
3074          .          .          .     LN11J
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3078          .      CN11J........................
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3081          .          .-------->  N11JI
3080          .      DN11J
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3084          .     RN11JS
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3089          .          .        N11G
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3099          .      CN11G............
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3102          .          .-------->  N11GI
3101          .      DN11G
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3105          .     RN11GS
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3110          .          .        N11F
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3120            .      CN11F...........
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3122            .      RN11F
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3127            .          .       N11C
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3138            .          .          .-------> LN11CD
3137            .          .      LN11C
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3141            .      CN11C...........
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3144            .          .-------> N11CWI
3143            .     DN11CW
                .          .
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3148            .          .-------> N11CEI
3147            .     DN11CE
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3152            .          .          .<-------  N11CWI
3151            .          .     DRN11C
                .          .          V
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3153            .          .     LN11CW
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3159            .          .          .          .<-------  N11CEI
3158            .          .          .     DR11C*
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3160            .          .          .     LN11CE
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3165            .     CN11C*......................
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                .          .
3168            .          .          .<-------  N11KI
3167            .          .     DRN11K
                .          .          V
                .          .          V
3169            .          .     RN11KS
                .          .          .
                .          .          .
3176            .          .          .-------> X5I
3175            .          .       DX5
                .          .          V
                .          .          V
3179            .          .      RX5W
                .          .          .
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3184            .          .          .       N11H
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3194            .          .     CN11H...........
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3196            .          .     RN11HW
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3201            .          .          .       N11D
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3212            .          .          .          .-------> LN11DD
3211            .          .          .     LN11D
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3215            .          .     LN11D*...........
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3218                    .<-------     X5I
3217                 DRX5
                        V
                        V
3219                 RX5S
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3224                    .        N11I
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3235                    .           .           .<-------   N11LI
3234                    .           .      DRN11L
                        .           .           V
                        .           .           V
3236                    .           .      RN11LS
                        .           .           .
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3242                    .           .           .           .<-------   N22AI
3241                    .           .           .      DRN22A
                        .           .           .           V
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3243                    .           .           .      RN22AW
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3248                    .       CN11I.......................
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3251                    .           .-------->   N11II
3250                    .       DN11I
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3254                    .      RN11IS
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3260                    .           .           .<-------   N11II
3259                    .           .      DRN11I
                        .           .           V
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3261                    .           .      RN11IW
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3266                    .        CX50............
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3268                    .        LX50
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3275                    .           .-------->   DX50I
3274                    .        DX50
                        .           V
                        .           V
3278                    .       RX50E
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3283                    .           .        N22
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3294                    .           .           .-------->   LN22D
3293                    .           .       LN22
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3297                    .        CN22............
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3300                    .           .-------->    N22I
3299                    .        DN22
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                        .           V
3303                    .       RN22W
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3309                    .           .           .<-------   DX50I
3308                    .           .      DRX50I
                        .           .           V
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3310                                                           RX50W
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3315                                                              .        N11E
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3326                                                              .          .-------> LN11ED
3325                                                              .       LN11E
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3329                                                       CN11E.......................
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3332                                                            .-------> N11EI
3331                                                       DN11E
                                                                V
                                                                V
3335                                                      RN11EW
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3340                                                 CX1............
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3343                                                   .------->     X1I
3342                                                 DX1
                                                       V
                                                       V
3346                                                RX1W
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3351                                 CN11D.......................
                                         V
                                         V
3353                                 RWBW1
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3358                                     .         WBW
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3364                                  CWBW............
                                         V
                                         V
3366                                  RBWB
                                         V
                                         V
3371                                 RWBW2
                                         .
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3377                                     .           .<-------   N11EI
3376                                     .      DRN11E
                                         .           V
                                         .           V
3378                                     .      R-WBE1
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3383                                     .           .         WB1
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3389                                     .       CPWB1............
                                         .           V
                                         .           V
3391                                     .        R-R3
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3396                                     .           .         WB2
                                         .           .           .
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3402                                     .       CPWB2............
                                         .           V
                                         .           V
404                                      .       R-4-5
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3409                                     .           .         WB3
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3415             .          .     CPWB3...........
                 .          .        V
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 .17             .          .       R-6
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3423             .          .        .          .<-------    N22I
3422             .          .        .     DRN22
                 .          .        .          .
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3424             .          .        .          .         WB4
                 .          .        .          .           .
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3430             .          .        .     CPWB4...........
                 .          .        .        V
                 .          .        .        V
3432             .          .        .      R-R1
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3437             .          .        .        .         WB5
                 .          .        .        .           .
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3443             .          .        .     CPWB5...........
                 .          .        .        V
                 .          .        .        V
3445             .          .        .      R-R2
                 .          .        .        .
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3450             .          .     CPR6...........
                 .          .        V
                 .          .        V
3452             .          .    RCR26
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3457             .          .        .       WB7
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 163             .          .    CR6W7...........
                 .          .        V
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3465             .          .     R-R7
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3470             .          .        .       WB6
                 .          .        .        V
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3476             .          .        .     R-R8
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3481             .          .     C7R8...........
                 .          .        V
                 .          .        V
3483             .          .    RC78
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3488             .          .        .       WB8
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3494             .          .  CP-678...........
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3496             .          .        .     WB10
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                 .          .        .        V
3502             .          .        .     R-R9
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3507             .          .   WBEOT...........
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 10              .          .        .-------->   TONRI
 509             .          .     DVNR
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3514            .          .          .-------->   DCLUB
3513            .          .      CCLUB
                .          .          V
                .          .          V
 317            .          .      RR287
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                .          .          .
3523            .          .          .-------->  DV87SI
3522            .          .      DV87S
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3526            .          .      RR289
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                .          .          .
3532            .          .          .-------->   DV89I
3531            .          .       DS89
                .          .          V
                .          .          V
3535            .          .      TODET
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3542            .          .          .-------->   DV91I
3541            .          .      DV91
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3545            .          .          .         WB9
                .          .          .          V
                .          .          .          V
3552            .          .          .       R-R10
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3560            .          .          .          .           .<-------     X1I
3559            .          .          .          .       DRIX1
                .          .          .          .           V
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3561            .          .          .          .        RX1S
                .          .          .          .           .
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 567            .      CN11B.......................................
                .          V
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3569            .      RCP91
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3572            .          .      SB-G4a
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3579            .          .          .          .<-------   DV91I
3578            .          .          .        DR91
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3580            .          .          .       R2DET
                .          .          .          .
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3583            .      CPDET........................
                .          V
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3586            .      S-DET
                .          V
                .          V
3595            .       RDET
                .          V
                .          V
3601            .     RN11BS
                .          .
                .          .
3606            .          .         N11
                .          .          .
                .          .          .
3617            .          .          .          .<-------  DV87SI
 616            .          .          .       DRV87
                .          .          .          V
                .          .          .          V
3618            .          .          .      RDV87S
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                 .          .          .          V
3623             .          .          .       R-G1
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3629             .          .          .          .-------->   DX55I
3628             .          .          .       DX55
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3633             .          .          .          .-------->   DX56I
3632             .          .          .       DX56
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3636             .          .          .      DX56W
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3642             .          .          .          .            .<--------   DV89I
3641             .          .          .          .       DRV89
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                 .          .          .          .           V
3643             .          .          .          .      RDV89S
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3648             .          .          .          .      RDV89E
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3653             .       CN11.......................................
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3655             .       RN11
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3660             .          .       N10
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3670             .          .          .       S10R
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3681             .          .          .          .-------->   S10RI
3680             .          .          .     DS10RO
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3684             .          .          .     RS10RS
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3689             .       CN10........................
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3692             .          .-------->    N10I
3691             .       DN10
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3695             .      RN10E
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3701             .          .          .<--------   DX56I
3700             .          .       DR56
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3702             .          .      RDR56
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3707             .          .          .       N09
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3717             .      CN09*........................
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3719             .          .       CN21
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3721             .          .       RN21
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3727             .          .          .          .<--------   TONRI
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3726                                  DRTONR
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3728                                     .          N20
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 738                            CN20.....................
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3740                            RN20
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3745                                  .        N12
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3756                                  .          .-------->   LN12D
3755                                  .      LN12
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3759                                  .          .          N13
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3769                            CN12.....................
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3771                            RN12
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3776                       CN09+............
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3778                       RN09*
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3783                            N19E
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3793                                  .      N19F
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3803                            CN19E............
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3805                            RN19E
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3810                                  .      N19D
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3820                            CN19D............
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3822                            RN19D
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3827                                  .      N19C
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3837                            CN19C............
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3839                            RN19C
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3844                                  .      N19B
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3854                            CN19B............
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3856                            RN19B
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3861                                  .      N19A
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3872                                          A21B
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                                                 V
3883                                         RA21B
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3889                 CN19A......................
                         V
                         V
3891                 397RR
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3898                     .        398A
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3911                     .           .       398B
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3923                 C398B......................
                         V
                         V
3925                398BRR
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3936                     .-------->   398BI
3935                 D398B
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3940                     .-------->  398BSI
3939                D398BE
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3943                     .        398D
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3955                     .           .        398E
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967                      .           .          .        398F
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3979                 C398F..................................
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                         V
3981                398FRR
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3992                     .           .<-------   398BI
3991                     .      D398BW
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3993                     .           .        398C
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4005                     .       C398C............
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4007                     .      398CRR
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4018                     .           .           .<-------  398BSI
4017                     .           .      398BSW
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4019                     .           .          .        398G
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4034                 C398G..................................
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                         V
4036                398GRR
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4043                 RM399
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4062             .          .       RN18
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4067             .          .          .          N17
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4077             .          .       CN17............
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4079             .          .       RN17
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4084             .          .          .          N16
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4094             .          .       CN16............
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4096             .          .       RN16
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4101             .          .          .        N15B
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4111             .          .          .       RN15B
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4116             .          .          .           .        N15A
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.27              .          .          .           .           .-------> LN15AD
.26              .          .          .           .       LN15A
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4132             .          .          .       RN15A
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4137             .          .          .           .         N15
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4149             .          .       RN15
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4154             .          .          .        N14A
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4164             .          .          .       RN14A
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4169             .          .          .           .         N14
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4179             .          .       CN14........................
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4181             .          .       RN14
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86               .          .          .        N08B
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4197                                                  .-------> LN08BD
4196                                          LN08B
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4200                                          RN08B
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4205                                                  .        N08A
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4216                                                  .           .-------> LN08AD
4215                                                  .       LN08A
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4219                                          CN08A............
                                                  V
                                                  V
4221                                          RN08A
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4226                                                  .         N08
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4236                                      CN08......................
                                              V
                                              V
4238                                      RN08
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4243                              CN09............
                                      V
                                      V
4245                              RN09
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4251                                      .<-------    N10I
4250                                  DRN10
                                              V
                                              V
252                                   RN10S
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4258                                      .------->   DX26I
4257                                  DX26O
                                              V
                                              V
4261                                  RX26S
                                              .
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4267                                          .           .<-------   DX26I
4266                                          .       DRX26
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4268                                          .           .        N07A
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4279                                          .           .           .-------> LN07AD
4278                                          .           .       LN07A
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4282                                          .       CN07A............
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4284                                          .           .         N07
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4294                              CN07.....................................
                                      V
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4296                              RN07
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01                                    A11L
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4311          .          .      RA11L
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4316          .          .        .        A11M
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4331          .          .        .          .        A11J
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4341          .          .        .          .          .        A11N
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4351          .          .        .          .          .       RA11N
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4366          .          .        .          .          .          .       RA11O
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4371          .          .        .          .          .        CX21............
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4373          .          .        .          .          .        RX21
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4378          .          .        .          .          .          .        A11K
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4388          .          .        .          .          .          .          .        A11G
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4399          .          .        .          .          .          .          .          .-------->   A11GI
4398          .          .        .          .          .          .          .      DA11G
              .          .        .          .          .          .          .          V
              .          .        .          .          .          .          .          V
4402          .          .        .          .          .          .          .     RA11GN
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4407          .          .        .       CA11K.......................................
              .          .        .          V
              .          .        .          V
4409          .          .        .       RA11K
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4415          .          .        .          .          .<-------   A11GI
4414          .          .        .          .     DRA11G
              .          .        .          .          V
              .          .        .          .          V
4416          .          .        .          .     RA11GW
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4421          .          .        .          .          .        A11I
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4431          .          .      CA11I...................................
              .          .        V
              .          .        V
4433          .          .      RA11I
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4438          .          .        .       A11E
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4448          .          .        .          .       A11F
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 159          .          .        .          .          .-------->   A11FI
 58           .          .        .          .     DA11F
              .          .        .          .          V
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4462          .          .          .          .     RA11FN
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4467          .          .     CA11E.......................
              .          .         V
              .          .         V
 469          .          .     RA11E
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4474          .          .         .       A11H
              .          .         .          V
              .          .         .          V
4484          .          .         .      RA11H
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4490          .          .         .          .          .<-------   A09UI
4489          .          .         .          .     DRA09U
              .          .         .          .          V
              .          .         .          .          V
4491          .          .         .          .     RA09UW
              .          .         .          .          .
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4496          .          .         .          .          .        A09T
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4506          .          .         .          .      CA09T............
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4509          .          .         .          .          .-------->  A09TI
4508          .          .         .          .      DA09T
              .          .         .          .          V
              .          .         .          .          V
4512          .          .         .          .     RA09TW
              .          .         .          .          .
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4518          .          .         .          .          .           .<-------   A11FI
4517          .          .         .          .          .      DRA11F
              .          .         .          .          .           V
              .          .         .          .          .           V
 519          .          .         .          .          .      RA11FS
              .          .         .          .          .           .
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4524          .          .         .          .       CX22............
              .          .         .          .          V
              .          .         .          .          V
4526          .          .         .          .       RX22
              .          .         .          .          .
              .          .         .          .          .
4531          .          .     CX23.......................
              .          .         V
              .          .         V
4533          .          .     RX23
              .          .         .
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4538          .          .         .       A99Z
              .          .         .          V
              .          .         .          V
4548          .          .         .      RA99Z
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4553          .          .         .          .       A11D
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4563          .          .         .      CA11D............
              .          .         .          V
              .          .         .          V
4565          .          .         .      RA11D
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4570          .          .         .          .       A11B
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 ,80          .          .         .          .          .        A11A
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4590          .          .       CA11A.................................
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              .          .           V
4592          .          .       RA11A
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 597          .          .           .        A11C
              .          .           .           V
              .          .           .           V
4607          .          .           .       RA11C
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4612          .          .       CA11*............
              .          .           V
              .          .           V
4614          .          .       RA11*
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4619          .          .           .         A11
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4629          .          .        CA11............
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4632          .          .           .           .<-------   N11OI
4631          .          .           .      DRN11O
              .          .           .           V
              .          .           .           V
4633          .          .           .      RN11OW
              .          .           .           .
              .          .           .           .
4639          .          .           .           .           .<-------   A09TI
4638          .          .           .           .      DRA09T
              .          .           .           .           V
              .          .           .           .           V
4640          .          .           .           .      RA09TS
              .          .           .           .           .
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 545          .          .           .           .           .        A09R
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4655          .          .           .       CA09R........................
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4658          .          .           .           .-------->   A09RI
4657          .          .           .       DA09R
              .          .           .           V
              .          .           .           V
4661          .          .           .      RA09RS
              .          .           .           .
              .          .           .           .
4667          .          .           .           .           .<-------   N11MI
4666          .          .           .           .      DRN11M
              .          .           .           .           V
              .          .           .           .           V
4668          .          .           .           .      RN11MW
              .          .           .           .           .
              .          .           .           .           .
4674          .          .           .           .           .           .<-------   N11JI
4673          .          .           .           .           .      DRN11J
              .          .           .           .           .           V
              .          .           .           .           .           V
4675          .          .           .           .           .      RN11JW
              .          .           .           .           .           .
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4681          .          .           .           .         CX4............
              .          .           .           .           V
              .          .           .           .           V
4683          .          .           .           .         RX4
              .          .           .           .           .
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 688          .          .           .           .           .        A09O
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4698          .          .           .       CA09O........................
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4701             .         .         .         .-------->   A09OI
4700             .         .         .      DA090
                 .         .         .         V
                 .         .         .         V
 704             .         .         .      RA09OS
                 .         .         .         .
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4710             .         .         .         .           .<-------   N11GI
4709             .         .         .         .      DRN11G
                 .         .         .         .           V
                 .         .         .         .           V
4711             .         .         .         .      RN11GW
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4716             .         .         .         .           .        A09K
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4726             .         .         .         .       CA09K............
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4729             .         .         .         .           .-------->   A09KI
4728             .         .         .         .       DA09K
                 .         .         .         .           V
                 .         .         .         .           V
4732             .         .         .         .      RA09KW
                 .         .         .         .           .
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4737             .         .         .       CX7............
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4740             .         .         .         .-------->     X7I
4739             .         .         .       DX7
                 .         .         .         V
                 .         .         .         V
4743             .         .         .       RX7S
                 .         .         .         .
                 .         .         .         .
 750             .         .         .         .-------->   AX25I
4749             .         .         .      DX25
                 .         .         .         V
                 .         .         .         V
4753             .         .         .      RX25E
                 .         .         .         .
                 .         .         .         .
4760             .         .         .         .           .<-------   AX25I
4759             .         .         .         .       DRX25
                 .         .         .         .           V
                 .         .         .         .           V
4761             .         .         .         .       RX25W
                 .         .         .         .           .
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4767             .         .         .         .           .           .<-------   A09KI
4766             .         .         .         .           .      DRA09K
                 .         .         .         .           .           V
                 .         .         .         .           .           V
4768             .         .         .         .           .      RA09KS
                 .         .         .         .           .           .
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4773             .         .         .         .           .           .        A09G
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4784             .         .         .         .           .           .           .-------->   A09GI
4783             .         .         .         .           .           .       DA09G
                 .         .         .         .           .           .           .
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4787             .         .         .         .           .       CA09G............
                 .         .         .         .           .           V
                 .         .         .         .           .           V
4789             .         .         .         .           .      RA09GW
                 .         .         .         .           .           .
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 795             .         .         .         .           .           .        A09J
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4806                                                                                  .<-------     X7I
4805                                                                              DRX7
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 807                                                                              RX7W
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4813                                                                      CA09J............
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4816                                                                                 .------->   A09JI
4815                                                                      DA09J
                                                                                     V
                                                                                     V
4819                                                                     RA09JS
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4825                                                                                 .        A09H
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4835                                  CA09H.............................................
                                          V
                                          V
4837                                  RA09H
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4844                                      .           .<-------   A09GI
4843                                      .      DRA09G
                                                     V
                                                     V
4845                                      .      RA09GS
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4851                                      .           .        A09F
                                                     .          .
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 862                                      .           .          .-------->  LA09FD
 061                                      .           .       LA09F
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4865                                  CA09F......................
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4868                                      .-------->   A09FI
4867                                  DA09F
                                          V
                                          V
4871                                 RA09FW
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4877                                      .        A09I
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4888                                      .           .-------->  LA09ID
4887                                      .       LA09I
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4892                                      .           .-------->   A09II
4891                                      .      DA09I
                                                     V
                                                     V
4895                                      .     RA09IS
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4901                                      .           .        A09E
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4912                                      .           .          .-------->  LA09ED
4911                                      .           .       LA09E
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 915                                  CA09E......................
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4917          .          .          .      RA09E
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4922          .          .          .          .      A09S
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 933          .          .          .          .        .          .<-------   A09RI
4932          .          .          .          .        .     DRA09R
              .          .          .          .        .          V
              .          .          .          .        .          V
4934          .          .          .          .        .     RA09RW
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4939          .          .          .          .      CA09S............
              .          .          .          .        .
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4942          .          .          .          .        .------->   A09SI
4941          .          .          .          .      DA09S
              .          .          .          .        V
              .          .          .          .        V
4945          .          .          .          .     RA09SS
              .          .          .          .        .
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4950          .          .          .          .        .        A09Q
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4960          .          .          .          .        .          .        A09P
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4971          .          .          .          .        .          .          .          .<-------   A09OI
4970          .          .          .          .        .          .          .     DRA09O
              .          .          .          .        .          .          .          V
              .          .          .          .        .          .          .          V
4972          .          .          .          .        .          .          .     RA09OW
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4977          .          .          .          .        .          .       CA09P............
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              .          .          .          .        .          .          V
 979          .          .          .          .        .          .       RA09P
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4984          .          .          .          .      CA09Q........................
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4987          .          .          .          .        .------->   A09QI
4986          .          .          .          .      DA09Q
              .          .          .          .        V
              .          .          .          .        V
4990          .          .          .          .     RA09QS
              .          .          .          .        .
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4995          .          .          .          .        .        A09M
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5006          .          .          .          .        .          .------->  LA09MD
5005          .          .          .          .        .     LA09M
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5009          .          .          .          .      CA09M............
              .          .          .          .        V
              .          .          .          .        V
5011          .          .          .          .      RA09M
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5017          .          .          .          .        .        A09N
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5028          .          .          .          .        .          .------->  LA09ND
5027          .          .          .          .        .     LA09N
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 031          .          .          .          .      CA09N............
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5033                                  RA09N
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5039                                    .          .<-------   A09JI
5038                                    .      DRA09J
                                        .          V
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5040                                    .      RA09JW
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5045                                    .          .        A09L
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5056                                    .          .          .-------> LA09LD
5055                                    .          .       LA09L
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5059                                  CA09L.......................
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5062                                    .-------> A09LI
5061                                  DA09L
                                        V
                                        V
5065                                 RA09LS
                                        .
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5071                                    .          .<-------   A09II
5070                                    .      DRA09I
                                        .          V
                                        .          V
5072                                    .      RA09IW
                                        .          .
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5077                                   CX10............
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5080                                    .-------> X10I
5079                                   DX10
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5083                                    .        A09D
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5094                                    .          .-------> LA09DD
5093                                    .      LA09D
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5097                                  CA09D............
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5100                                    .          .<-------   X10I
5099                                    .      DRX10
                                        .          V
                                        .          V
5101                                    .      RX10W
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5107                                    .          .-------> X11I
5106                                    .        DX11
                                        .          V
                                        .          V
5110                                    .      RX11S
                                        .          .
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5115                              CA09C*.......................
                                       V
                                       V
5117                              RA09C*
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5122                                   A09C
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5132                              CA09C............
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5134             .         .         .      RA09C
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140              .         .         .         .        A09B
                 .         .         .         .           V
                 .         .         .         .           V
5150             .         .         .         .       RA09B
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5155             .         .         .         .           .        A09A
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5165             .         .         .      CA09A.......................
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5168             .         .         .         .-------->   A09AI
5167             .         .         .     DA09AO
                 .         .         .         V
                 .         .         .         V
5171             .         .         .     RA09AW
                 .         .         .         .
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5176             .         .         .         .        A99T
                 .         .         .         .           .
                 .         .         .         .           .
5187             .         .         .         .           .-------->  LA99TD
5186             .         .         .         .       LA99T
                 .         .         .         .           V
                 .         .         .         .           V
5190             .         .         .         .       RA99T
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5195             .         .         .         .           .         A09
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5205             .         .         .      CA09.......................
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5208             .         .         .         .           .<-------   A09FI
5207             .         .         .         .     DRA09F
                 .         .         .         .           V
                 .         .         .         .           V
5209             .         .         .         .     RA09FS
                 .         .         .         .           .
                 .         .         .         .           .
5214             .         .         .         .           .        S30D
                 .         .         .         .           .           .
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5224             .         .         .         .      CS30D............
                 .         .         .         .           V
                 .         .         .         .           V
5226             .         .         .         .      RS30D
                 .         .         .         .           .
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5231             .         .         .         .           .        S30B
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5241             .         .         .         .           .           .        S30C
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5251             .         .         .         .      CS30B.......................
                 .         .         .         .           .
                 .         .         .         .           .
5254             .         .         .         .           .-------->  DS30BI
5253             .         .         .         .     DS30BO
                 .         .         .         .           V
                 .         .         .         .           V
5257             .         .         .         .     RS30BW
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262              .         .         .         .           .        S30A
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5272                                  CS30A...........
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5275                                    .-------> DS30AI
5274                                DS30AO
                                      V
                                      V
5278                                RS30AW
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                                        .
5283                                    .         S30
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5293                                  CS30...........
                                      V
                                      V
5295                                  RS30
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5300                                    .        A07G
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5311                                    .          .-------> LA07GD
5310                                    .      LA07G
                                        .        V
                                        .        V
5314                                    .      RA07G
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5319                                    .          .        A07F
                                        .          .          V
                                        .          .          V
5329                                    .          .       RA07F
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5334                                    .          .          .        A07E
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 144                                    .      CA07E.......................
                                        .        V
                                        .        V
5346                                    .      RA07E
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5351                                    .          .        A07C
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5361                                    .      CA07C............
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                                        .        V
5363                                    .      RA07C
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5368                                    .          .        A07H
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5378                                    .          .       RA07H
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5384                                    .          .          .          .<-------   A09AI
5383                                    .          .          .      DA09A
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5385                                    .          .          .     RA09AS
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5390                                    .          .          .        .        A08B
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5400                                    .          .          .      CA08B............
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 02                                     .          .          .      RA08B
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5407                                                                                                                A07D
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5417                                                                  CA07D.....................................
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419                                                                   RA07D
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5424                                                                      .          A07B
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5435                                                                      .            .-------> LA07BD
5434                                                                      .        LA07B
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5438                                                          CA07B.......................
                                                                  V
                                                                  V
5441                                                          RA07B
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5447                                                                  A06A
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5457                                                          CA06A............
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5459                                                                  A07A
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5469                                                                  RA07A
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5474                                                                      .          A07
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5484                                                                  CA07............
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5486                                                                  RA07
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5492                                                                      .          A06
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5502                                                           CA06.......................
                                                                  V
                                                                  V
5504                                                           RA06
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5509                                                                  A99Q
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5519                                                          CA99Q............
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5521                                       DUMMY1......................
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5524                                             .-------> DUMMYO
5523                                       DUMMY
                                                 V
                                                 V
5527                                       EMPTY
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5532                                                 S10V
                                                        V
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5542                                                 RS10V
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5547                                                        S10U
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5557            .         .         .     CS10U...........
                .         .         .         V
                .         .         .         V
559             .         .         .     RS10U
                .         .         .         .
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5564            .         .         .         .       S10T
                .         .         .         .         .
                .         .         .         .         .
5574            .         .         .     CS10T...........
                .         .         .         V
                .         .         .         V
5576            .         .         .     RS10T
                .         .         .         .
                .         .         .         .
5582            .         .         .         .           .<-------  DS30BI
5581            .         .         .         .     DS30BX
                .         .         .         .          V
                .         .         .         .          V
5583            .         .         .         .     RS30BS
                .         .         .         .          .
                .         .         .         .          .
5588            .         .         .         .          .       S10S
                .         .         .         .          .         .
                .         .         .         .          .         .
5598            .         .         .     CS10S......................
                .         .         .         V
                .         .         .         V
5600            .         .         .     RS10S
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5605            .         .         .         .       S10Q
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5615            .         .         .     CS10Q...........
                .         .         .         V
                .         .         .         V
617             .         .         .     RS10Q
                .         .         .         .
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5623            .         .         .         .           .<-------   S10RI
5622            .         .         .         .     DRS10R
                .         .         .         .          V
                .         .         .         .          V
5624            .         .         .         .     RS10RW
                .         .         .         .          .
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5629            .         .         .         .          .       S10O
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                .         .         .         .          .         .
5639            .         .         .     CS10O......................
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5641            .         .         .         .       S10J
                .         .         .         .         .
                .         .         .         .         .
5652            .         .         .         .           .------->   S10JI
5651            .         .         .         .     DS10JO
                .         .         .         .          V
                .         .         .         .          V
5657            .         .         .         .     RS10JW
                .         .         .         .          .
                .         .         .         .          .
5662            .         .         .     CS10KN...........
                .         .         .         V
                .         .         .         V
5664            .         .         .     RS10KN
                .         .         .         .
                .         .         .         .
670             .         .         .         .           .<-------   S10JI
569             .         .         .         .     S10JX
                .         .         .         .          V
                .         .         .         .          V
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5671                                  RS10JS
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5676                                     .        S10I
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 686                                  CS10I............
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5689                                     .-------->   S10II
5688                                  DS10IO
                                         V
                                         V
5694                                  RS10IW
                                         .
                                         .
5699                            CS10KM............
                                     V
                                     V
5701                            RS10KM
                                     .
                                     .
5707                                     .<-------   S10II
5706                                  S10IX
                                         V
                                         V
5708                                  RS10IS
                                         .
                                         .
5713                                     .        S10N
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5723                                  CS10N............
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5726                                     .-------->   S10NI
5725                                  DS10NO
                                         V
                                         V
 729                                  RS10NW
                                         .
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5734                                     .        S10K
                                         .          .
                                         .          .
5744                            CS10K........................
                                     V
                                     V
5746                            RS10K
                                     .
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5752                                     .<-------   S10NI
5751                                  S10NX
                                         V
                                         V
5753                                  RS10NS
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5758                                     .        S10G
                                         .          .
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5768                            CS10G........................
                                     V
                                     V
5770                            RS10G
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                                     .
5776                                 .-------->    X40I
5775                            DX40
                                     V
                                     V
 779                            RX40S
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5784                                 .        S10D
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5794            .         .         .   CS10D............
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797             .         .         .         .         .<-------  DS30AI
796             .         .         .         .     DS30X
                .         .         .         .         V
                .         .         .         .         V
5798            .         .         .         .    RS30AS
                .         .         .         .         .
                .         .         .         .         .
5803            .         .         .         .         .        S10P
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                .         .         .         .         .           .
5813            .         .         .         .     CS10P............
                .         .         .         .         V
                .         .         .         .         V
5815            .         .         .         .     RS10P
                .         .         .         .         .
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5820            .         .         .         .         .        S10E
                .         .         .         .         .           .
                .         .         .         .         .           .
5830            .         .         .         .     CS10E............
                .         .         .         .         V
                .         .         .         .         V
5832            .         .         .         .     RS10E
                .         .         .         .         .
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5837            .         .         .         .         .        S10M
                .         .         .         .         .           V
                .         .         .         .         .           V
5847            .         .         .         .         .       RS10M
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                .         .         .         .         .           .
5852            .         .         .         .    CS10E*............
                .         .         .         .         V
                .         .         .         .         V
854             .         .         .         .    RS10E*
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5859            .         .         .         .         .        S10F
                .         .         .         .         .           V
                .         .         .         .         .           V
5869            .         .         .         .         .       RS10F
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                .         .         .         .         .           .
5874            .         .         .         .    CS10F*............
                .         .         .         .         V
                .         .         .         .         V
5876            .         .         .         .    RS10F*
                .         .         .         .         .
                .         .         .         .         .
5881            .         .         .         .         .        S10C
                .         .         .         .         .           .
                .         .         .         .         .           .
5891            .         .         .   CS10C........................
                .         .         .       V
                .         .         .       V
5893            .         .         .   RS10C
                .         .         .         .
                .         .         .         .
5899            .         .         .         .         .<-------    X40I
5898            .         .         .         .     DRX40
                .         .         .         .         V
                .         .         .         .         V
5900            .         .         .         .     RX40E
                .         .         .         .         .
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5905            .         .         .         .         .        S10B
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5915            .         .         .         .     CS10B............
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5917                                                         RS10B
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5922                                                            .        S10A
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5932                                                            .          .          S10
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5942                                                       CS10.......................................
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                                                              V
5944                                                       RS10
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5949                                                            .         N06
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5959                                  CN06.......................................
                                         V
                                         V
5961                                  RN06
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5966                                     .        N05C
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5976                                  CN05C............
                                         V
                                         V
5978                                  RN05C
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5983                                     .        N05B
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5994                                     .           .-------> DN05BI
5993                                     .       DN05B
                                         .          V
                                         .          V
5997                                     .      RN05BE
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6002                                     .           .       N05A
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6012                                     .           .         .         N05
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6022                                  CN05.......................................
                                         V
                                         V
6024                                  RN05
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6030                                     .           .<------- DN05BI
6029                                     .      DN05BX
                                         .          V
                                         .          V
6031                                     .      RN05BS
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6036                                     .           .       N04A
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6046                                  CN04A........................
                                         V
                                         V
6048                                  RN04A
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6053                                     .         N04
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6064          .          .          .-------->  LN04D
6063          .          .      LN04
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 067          .      CN04..........
              .        V
              .        V
6069          .      RN04
              .          .
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6074          .          .      S01G
              .          .        V
              .          .        V
6084          .          .     RS01G
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6089          .          .        .       S01D
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6099          .          .     CS01D..........
              .          .        V
              .          .        V
6101          .          .     RS01D
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6106          .          .        .       S01H
              .          .        .         V
              .          .        .         V
6116          .          .        .      RS01H
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6121          .          .        .         .       S01E
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6131          .          .        .      CS01E..........
              .          .        .         V
              .          .        .         V
6133          .          .        .      RS01E
              .          .        .         .
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6138          .          .        .         .       S01C
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6148          .          .     CS01C.......................
              .          .        V
              .          .        V
6150          .          .     RS01C
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6155          .          .        .       S01I
              .          .        .         V
              .          .        .         V
6165          .          .        .      RS01I
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6170          .          .        .         .       S01F
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6180          .          .        .      CS01F..........
              .          .        .         V
              .          .        .         V
6182          .          .        .      RS01F
              .          .        .         .
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6187          .          .        .         .       S01B
              .          .        .         .         .
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6197          .          .     CS01B.......................
              .          .        V
              .          .        V
6199          .          .     RS01B
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6204          .          .        .       S01A
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6214                CS01A............
                        V
                        V
6216                RS01A
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6221                    .          S01
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6231                CS01............
                        V
                        V
6233                RS01
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6239            CN03*............
                    V
                    V
6241            RN03*
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6247                N03A
                        V
                        V
6257                RN03A
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6263                    .        N03B
                        .          V
                        .          V
6273                    .       RN03B
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6279                    .          .          N03
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6289            CN03.................................
                    V
                    V
6291            RN03
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6297                N02B
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6308                    .-------> LN02BD
6307                LN02B
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6311            CN02B............
                    V
                    V
6313            RN02B
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6319                N02
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6329                    .        N02A
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6339            CN02......................
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6341                S20A
                        V
                        V
6351                RS20A
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6356                    .          S20
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6366                CS20............
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                 .          .          V
                 .          .          V
6368             .          .       RS20
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173              .          .          .        A05A
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                 .          .          .           V
6383             .          .          .       RA05A
                 .          .          .           .
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6388             .          .          .           .        A99N
                 .          .          .           .           .
                 .          .          .           .           .
6398             .          .       CA99N.......................
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6401             .          .          .           .<-------   A09SI
6400             .          .          .      DRA09S
                 .          .          .           V
                 .          .          .           V
6402             .          .          .      RA09SW
                 .          .          .           .
                 .          .          .           .
6407             .          .          .           .        A99Y
                 .          .          .           .           .
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6417             .          .          .       CA99Y............
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6419             .          .          .           .        A99X
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6430             .          .          .           .           .           .<-------   A09QI
6429             .          .          .           .           .      DRA09Q
                 .          .          .           .           .           V
                 .          .          .           .           .           V
6431             .          .          .           .           .      RA09QW
                 .          .          .           .           .           .
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6436             .          .          .           .           .           .        A10A
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6446             .          .          .           .           .       CA10A............
                 .          .          .           .           .           V
                 .          .          .           .           .           V
6448             .          .          .           .           .       RA10A
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6453             .          .          .           .           .           .         A10
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6463             .          .          .           .           .        CA10............
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6465             .      DUMMY2.............................................
                 .          .
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6468             .          .       .<-------    X11I
6467             .          .    DRX11I
                 .          .       V
                 .          .       V
6469             .          .    RX11W
                 .          .       .
                 .          .       .
6474             .          .       .       A99V
                 .          .       .          .
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6484             .          .    CA99V............
                 .          .       .
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6487             .          .       .          .<-------   A09LI
 86              .          .       .      DRA09L
                 .          .       .          V
                 .          .       .          V
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6488                                RA09LW
                                       .
6493                                       .        A99W
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 504                                       .          .-------> LA99WD
6503                                       .       LA99W
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6507                                RA99W.............
                                       .
6509                                       .        A99U
                                           .          .
6519                                       .          .        A99S
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6529                                       .          .          .        A08A
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                                           .          .          .          V
6539                                       .          .          .       RA08A
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6544                                       .          .          .          .        A99R
                                           .          .          .          .          V
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6554                                       .          .          .          .       RA99R
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6559                                       .          .          .          .          .          .        A08
                                           .          .          .          .          .          .          .
6569                                       .          .          .          .       CA08.......................
                                           .          .          .          .          .
6571                   DUMMY3...............................................
                                       .
6573                           .       A99P
                               .         .
6583                           .         .       A05
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6593                           .         .         .        A99O
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6603                           .         .         .          .        A99M
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6613                           .         .         .          .          .        A99L
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6623                   DUMMY4...............................................
                               .
6625                           .       A99K
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6635                           .         .       A99J
                               .         .         .
6645                           .         .         .        A99I
                               .         .         .          .
6655                           .         .         .          .        A04A
                               .         .         .          .          V
                               .         .         .          .          V
6665                           .         .         .          .       RA04A
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 670                           .         .         .          .          .        A04
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6680                                                  CA04............
                                                         V
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6682                                                  RA04
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6687                                                     .        A03D
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6697                                                  CA03D...........
                                                         V
                                                         V
6699                                                  RA03D
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6704                                                     .        A03E
                                                         .           V
                                                         .           V
6714                                                     .       RA03E
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6719                                                     .           .        A03B
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6729                                                     .       CA03B...........
                                                         .           V
                                                         .           V
6731                                                     .       RA03B
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6736                                                     .           .        A03A
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6746                                                     .       CA03A...........
                                                         .           V
                                                         .           V
6748                                                     .       RA03A
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6753                                                     .           .        A03
                                                         .           .           .
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6763                                                  CA03......................
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6765                 DUMMY5.............................................
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6767                    .        A99G
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                        .           .
6778                    .           .-------> LA99GD
6777                    .       LA99G
                        .           .
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6781                    .           .        A99H
                        .           .           .
                        .           .           .
6792                    .           .           .-------> LA99HD
6791                    .           .       LA99H
                        .           .           V
                        .           .           V
6795                    .           .       RA99H
                        .           .           .
                        .           .           .
6800                    .           .           .        A02D
                        .           .           .           .
                        .           .           .           .
6811                    .           .           .           .-------> LA02DD
6810                    .           .           .       LA02D
                        .           .           .           V
                        .           .           .           V
814                     .           .           .       RA02D
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6819                                                A99F
                                                      .
6929                                  CA99F.......................
                                                      .
6831                                            A02
                                                      .
6841                                                A01H
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6852                                                  .-------> LA01HD
6851                                              LA01H
                                                      .
6855                                                  .       A99E
                                                      .         .
6866                                                  .         .-------> LA99ED
6865                                                  .     LA99E
                                                      .         .
6869                  DUMMY6.......................................................
                                                      .
6871                          A99B
                                .
6881                                  A99C
                                        .
6892                                    .-------> LA99CD
6891                                  LA99C
                                        .
6895                                        A99D
                                              .
6906                                          .-------> LA99DD
6905                                        LA99D
                                              .
6909                                              A01A
                                                     V
                                                     V
6919                                              RA01A
                                                      .
6924                                                  .       A01
                                                      .         .
6934                                              CA01............
                                                      .
6936                                                  .     A99A
                                                      .         .
6947                                                  .         .-------> LA99AD
6946                                                  .     LA99A
                                                      .         .
6950                                                  .         .       A99
                                                      .         .         .
6960                  DUMMY7.....................................................................
                                                      .
6962                          A01E
                                .
 973                            .-------> A01EI
6972                          DA01E
                                V
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                                V
6976                        RA01ES

)81                                     N01A
                                           V
                                           V
6991                                    RN01A

6996                                                   N01

7006                        CN01.......................

7008                                    A03C
                                           V
                                           V
7018                                    RA03C

7023                                                 A02B
                                                        V
                                                        V
7033                                                RA02B

7039                                    CA02A*............
                                           V
                                           V
7041                                    RA02A*

7046                                                 A02A

056                                                                A01G

7067                                                                    .-------> LA01GD
7066                                                               LA01G

7070                                    CA01G........................
                                           V
                                           V
7072                                    RA01G

7077                                                 A02C

7088                                                    .-------> LA02CD
7087                                              LA02C
                                                        V
                                                        V
7091                                              RA02C

7097                                                               A01F

7108                                                                    .-------> LA01FD
7107                                                               LA01F

7111                                              CA01F............
                                                        V
                                                        V
7113                                              RA01F

/118                                                               A01D
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7129                                                  .-------> LA01DD
7128                                            LA01D
                                                  .
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133                                               .          .<-------   A01EI
132                                               .      DRA01E
                                                  .          V
                                                  .          V
7134                                              .      RA01EW
                                                  .          .
                                                  .          .
7139                                        CA01D.......................
                                                V
                                                V
7141                                       RA01D
                                                .
                                                .
7147                                            .        A01C
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                                                .          .
7158                                            .          .-------> LA01CD
7157                                            .       LA01C
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7161                                            .          .        A01B
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7172                                            .          .          .-------> LA01BD
7171                                            .          .       LA01B
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7175                                  CA01B.....................................
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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
+	HYDROGRAPH AT	N21K	590.	4.03	35.	9.	6.	0.23
+	DIVERSION TO	N21KI*	140.	4.03	16.	4.	3.	0.23
+	HYDROGRAPH AT	DN21KL	449.	4.03	19.	5.	3.	0.23
+	DIVERSION TO	N21KI	164.	4.03	8.	2.	1.	0.23
+	HYDROGRAPH AT	DN21KO	285.	4.03	12.	3.	2.	0.23
+	ROUTED TO	RN21KS	207.	4.30	12.	3.	2.	0.23
+	HYDROGRAPH AT	N21I	223.	4.30	33.	8.	6.	0.28
	DIVERSION TO	LN21ID	81.	4.03	2.	1.	0.	0.28
+	HYDROGRAPH AT	LN21I	223.	4.30	31.	8.	6.	0.28

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	2 COMBINED AT	CN21I*	428.	4.30	43.	11.	8.	0.50
+	HYDROGRAPH AT	N21J	565.	4.07	39.	10.	7.	0.23
+	HYDROGRAPH AT	DR21K*	140.	4.03	16.	4.	3.	0.23
+	ROUTED TO	LN21K	0.	0.03	0.	0.	0.	0.23
+	HYDROGRAPH AT	DRN21K	164.	4.03	8.	2.	1.	0.23
+	ROUTED TO	RN21KE	145.	4.17	8.	2.	1.	0.23
+	3 COMBINED AT	CN21J	648.	4.07	46.	12.	8.	0.46
+	DIVERSION TO	N21JI	200.	4.07	14.	4.	3.	0.46
+	HYDROGRAPH AT	DN21JO	448.	4.07	32.	8.	6.	0.46
+	ROUTED TO	RN21JS	404.	4.23	32.	8.	6.	0.46
+	HYDROGRAPH AT	N21Z	249.	4.10	22.	5.	4.	0.11
	DIVERSION TO	LN21ZD	155.	3.93	5.	1.	1.	0.11
+	HYDROGRAPH AT	LN21Z	249.	4.10	17.	4.	3.	0.11
+	2 COMBINED AT	CN21Z	568.	4.20	48.	12.	9.	0.57
+	DIVERSION TO	N21ZI	45.	4.20	2.	0.	0.	0.57
+	HYDROGRAPH AT	DN21ZO	522.	4.20	46.	12.	8.	0.57
+	DIVERSION TO	N21ZI*	164.	4.20	7.	2.	1.	0.57
+	HYDROGRAPH AT	DN21Z*	376.	4.37	40.	10.	7.	0.57
+	ROUTED TO	RN21ZW	348.	4.47	40.	10.	7.	0.57
+	HYDROGRAPH AT	N11P	704.	4.13	40.	10.	7.	0.38
+	ROUTED TO	RN11P	547.	4.37	40.	10.	7.	0.38
+	HYDROGRAPH AT	N11L	363.	4.17	31.	8.	6.	0.29
	2 COMBINED AT	CN11L	709.	4.33	64.	16.	11.	0.68
	DIVERSION TO							

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	N11LI	679.	4.33	58.	15.	10.	0.68
HYDROGRAPH AT	DN11L	30.	4.13	6.	1.	1.	0.68
ROUTED TO	RN11LE	30.	4.83	6.	1.	1.	0.68
3 COMBINED AT	CN21I	678.	4.33	81.	20.	15.	0.85
ROUTED TO	RN21I	663.	4.47	81.	20.	15.	0.85
HYDROGRAPH AT	N22B	455.	4.10	40.	10.	7.	0.19
DIVERSION TO	N22BI	410.	4.10	36.	9.	6.	0.19
HYDROGRAPH AT	DN22B	46.	4.10	4.	1.	1.	0.19
ROUTED TO	RN22BE	24.	4.33	4.	1.	1.	0.19
HYDROGRAPH AT	N21F	158.	4.23	28.	7.	5.	0.10
3 COMBINED AT	CN21F	771.	4.47	109.	27.	20.	1.05
ROUTED TO	RN21F	693.	4.67	109.	27.	20.	1.05
HYDROGRAPH AT	N21G	121.	4.13	17.	4.	3.	0.06
HYDROGRAPH AT	DR21Z*	164.	4.20	7.	2.	1.	0.57
ROUTED TO	RN21ZS	124.	4.57	7.	2.	1.	0.57
2 COMBINED AT	CN21G	194.	4.53	24.	6.	4.	0.06
DIVERSION TO	N21GI	105.	4.53	5.	1.	1.	0.06
HYDROGRAPH AT	DN21GO	89.	4.53	19.	5.	3.	0.06
ROUTED TO	RN21GS	89.	4.80	19.	5.	3.	0.06
HYDROGRAPH AT	N21E	93.	4.23	18.	4.	3.	0.06
3 COMBINED AT	CN21E	823.	4.63	142.	36.	26.	1.18
ROUTED TO	RN21E	808.	4.80	142.	36.	26.	1.18
HYDROGRAPH AT	N21D	152.	4.07	13.	3.	2.	0.05
DIVERSION TO	LN21DD	152.	4.07	8.	2.	1.	0.05

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		RN24O	380.	4.23	40.	10.	7.	0.22
+	HYDROGRAPH AT	N24S	147.	4.07	10.	2.	2.	0.05
++	ROUTED TO	RN24S	93.	4.60	10.	2.	2.	0.05
+	HYDROGRAPH AT	N24T	50.	4.03	3.	1.	1.	0.02
+	ROUTED TO	RN24T	37.	4.63	3.	1.	1.	0.02
+	HYDROGRAPH AT	N24P	297.	4.13	21.	5.	4.	0.12
+	4 COMBINED AT	CN24P	615.	4.17	73.	18.	13.	0.41
+	ROUTED TO	RN24P	614.	4.20	73.	18.	13.	0.41
+	HYDROGRAPH AT	N24U	333.	4.07	21.	5.	4.	0.11
+	ROUTED TO	RN24U	293.	4.23	21.	5.	4.	0.11
+	2 COMBINED AT	CN24U*	883.	4.23	93.	23.	17.	0.52
	ROUTED TO	RN24U*	849.	4.30	93.	23.	17.	0.52
+	HYDROGRAPH AT	N24V	116.	4.07	7.	2.	1.	0.05
+	ROUTED TO	RN24V	74.	4.50	7.	2.	1.	0.05
+	2 COMBINED AT	CN24V*	848.	4.30	100.	25.	18.	0.57
+	ROUTED TO	RN24V*	811.	4.40	100.	25.	18.	0.57
+	HYDROGRAPH AT	N24M	504.	4.20	40.	10.	7.	0.25
+	2 COMBINED AT	CN24M	996.	4.37	134.	33.	24.	0.82
+	ROUTED TO	RN24M	976.	4.43	134.	33.	24.	0.82
+	HYDROGRAPH AT	N24L	1077.	4.07	68.	17.	12.	0.38
+	ROUTED TO	RN24L	999.	4.17	68.	17.	12.	0.38
+	2 COMBINED AT	CN24I*	1211.	4.23	190.	48.	34.	1.20
	ROUTED TO	RN24I*	1166.	4.60	190.	48.	34.	1.20
+	HYDROGRAPH AT	N24I	256.	4.50	41.	10.	7.	0.30

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	HYDROGRAPH AT	N24H	641.	4.13	59.	15.	11.	0.29
+	HYDROGRAPH AT	N24N	214.	4.20	19.	5.	3.	0.13
+	ROUTED TO	RN24N	117.	4.67	19.	5.	3.	0.13
+	HYDROGRAPH AT	N24J	101.	4.43	16.	4.	3.	0.12
+	2 COMBINED AT	CN24J	202.	4.57	35.	9.	6.	0.25
+	ROUTED TO	RN24J	201.	4.63	35.	9.	6.	0.25
+	HYDROGRAPH AT	N24K	137.	4.60	29.	7.	5.	0.21
+	5 COMBINED AT	CN24I	1510.	4.60	309.	78.	56.	2.25
+	ROUTED TO	RN24I	1506.	4.70	309.	78.	56.	2.25
+	HYDROGRAPH AT	DRN21J	200.	4.07	14.	4.	3.	0.46
+	ROUTED TO	RN21JE	165.	4.47	14.	4.	3.	0.46
	2 COMBINED AT	CN24G*	1507.	4.70	312.	79.	57.	2.71
+	ROUTED TO	RN24G*	1501.	4.83	312.	79.	57.	2.71
+	HYDROGRAPH AT	N24G	503.	4.43	63.	16.	11.	0.44
+	DIVERSION TO	LN24GD	55.	4.00	1.	0.	0.	0.44
+	HYDROGRAPH AT	LN24G	503.	4.43	61.	15.	11.	0.44
+	2 COMBINED AT	CN24G	1666.	4.77	351.	89.	64.	3.15
+	HYDROGRAPH AT	DRN21Z	45.	4.20	2.	0.	0.	0.57
+	ROUTED TO	RN21ZE	13.	4.37	2.	0.	0.	0.57
+	2 COMBINED AT	CN24G+	1666.	4.77	351.	89.	64.	3.15
+	ROUTED TO	RN24G	1658.	4.83	351.	89.	64.	3.15
+	HYDROGRAPH AT	N24F	194.	4.20	17.	4.	3.	0.11
	2 COMBINED AT	CN24F	1670.	4.83	362.	91.	66.	3.26
	HYDROGRAPH AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		N24D	184.	4.10	17.	4.	3.	0.09
+	2 COMBINED AT	CN24D	1677.	4.83	374.	95.	68.	3.34
+	ROUTED TO	LN24D	13.	9.00	13.	11.	9.	3.34
+	HYDROGRAPH AT	N21H	76.	4.07	6.	2.	1.	0.03
+	HYDROGRAPH AT	DRN21G	105.	4.53	5.	1.	1.	0.06
+	ROUTED TO	RN21GE	83.	4.77	5.	1.	1.	0.06
+	2 COMBINED AT	CN21H	88.	4.77	11.	3.	2.	0.03
+	ROUTED TO	RN21H	55.	5.00	11.	3.	2.	0.03
+	HYDROGRAPH AT	N24E	24.	4.27	3.	1.	1.	0.02
+	ROUTED TO	RN24E	22.	4.47	3.	1.	1.	0.02
+	3 COMBINED AT	CN24D*	55.	4.90	19.	13.	11.	3.40
	HYDROGRAPH AT	N27F	649.	4.13	47.	12.	9.	0.28
+	ROUTED TO	RN27F	621.	4.17	47.	12.	9.	0.28
+	HYDROGRAPH AT	N27G	485.	4.17	41.	10.	7.	0.26
+	2 COMBINED AT	CN27G	1077.	4.17	88.	22.	16.	0.55
+	ROUTED TO	RN27G	1004.	4.27	87.	22.	16.	0.55
+	HYDROGRAPH AT	N27E	277.	4.27	25.	6.	5.	0.19
+	ROUTED TO	RN27E	257.	4.40	25.	6.	5.	0.19
+	HYDROGRAPH AT	N27H	442.	4.13	33.	8.	6.	0.21
+	ROUTED TO	RN27H	387.	4.30	33.	8.	6.	0.21
+	HYDROGRAPH AT	N27C	151.	4.20	11.	3.	2.	0.09
+	4 COMBINED AT	CN27C	1376.	4.30	142.	36.	26.	1.03
	ROUTED TO	RN27C	1339.	4.33	142.	36.	26.	1.03
+	HYDROGRAPH AT	N27I	404.	4.10	27.	7.	5.	0.17

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
+	ROUTED TO	RN27I	338.	4.33	27.	7.	5.	0.17
+	HYDROGRAPH AT	N27B	104.	4.23	11.	3.	2.	0.08
+	HYDROGRAPH AT	N27J	495.	4.10	31.	8.	6.	0.19
+	DIVERSION TO	N27JI	186.	4.10	9.	2.	2.	0.19
+	HYDROGRAPH AT	DN27J	309.	4.10	22.	6.	4.	0.19
+	ROUTED TO	RN27JW	267.	4.37	22.	6.	4.	0.19
+	4 COMBINED AT	CN27B	1692.	4.33	189.	47.	34.	1.46
+	ROUTED TO	RN27B	1598.	4.47	189.	47.	34.	1.46
+	HYDROGRAPH AT	N27D	149.	4.13	17.	4.	3.	0.09
+	DIVERSION TO	LN27DD	149.	4.13	10.	2.	2.	0.09
+	HYDROGRAPH AT	LN27D	110.	4.30	7.	2.	1.	0.09
	HYDROGRAPH AT	DRN27J	186.	4.10	9.	2.	2.	0.19
+	ROUTED TO	RN27JS	171.	4.17	9.	2.	2.	0.19
+	2 COMBINED AT	CN27D	192.	4.30	16.	4.	3.	0.28
+	DIVERSION TO	N27DI	87.	4.30	11.	3.	2.	0.28
+	HYDROGRAPH AT	DN27DO	104.	4.30	5.	1.	1.	0.28
+	ROUTED TO	RN27DW	68.	4.67	5.	1.	1.	0.28
+	HYDROGRAPH AT	DRN27D	87.	4.30	11.	3.	2.	0.28
+	ROUTED TO	RN27DS	83.	4.73	11.	3.	2.	0.28
+	HYDROGRAPH AT	N27K	588.	4.37	104.	26.	19.	0.63
+	ROUTED TO	RN27K	571.	4.57	104.	26.	19.	0.63
+	HYDROGRAPH AT	N27L	700.	4.33	80.	20.	14.	0.47
	2 COMBINED AT	CN27L	960.	4.43	170.	43.	31.	1.09
	ROUTED TO							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		RN27L	959.	4.47	170.	43.	31.	1.09
+	HYDROGRAPH AT	N25S	79.	4.07	7.	2.	1.	0.03
+	ROUTED TO	RN25S	75.	4.13	7.	2.	1.	0.03
+	2 COMBINED AT	CN25O*	976.	4.47	177.	44.	32.	1.12
+	ROUTED TO	RN25O*	969.	4.53	177.	44.	32.	1.12
+	HYDROGRAPH AT	N25O	252.	4.10	24.	6.	4.	0.13
+	DIVERSION TO	LN25OD	245.	4.07	11.	3.	2.	0.13
+	HYDROGRAPH AT	LN25O	244.	4.13	14.	3.	2.	0.13
+	2 COMBINED AT	CN25O	1015.	4.50	186.	47.	34.	1.25
+	ROUTED TO	RN25O	1003.	4.63	186.	47.	34.	1.25
+	4 COMBINED AT	CN27*	1995.	4.53	345.	87.	63.	2.99
	HYDROGRAPH AT	N27	223.	4.40	37.	9.	7.	0.28
+	HYDROGRAPH AT	N27A	152.	4.27	17.	4.	3.	0.11
+	HYDROGRAPH AT	N26B	308.	4.30	41.	10.	7.	0.22
+	DIVERSION TO	LN26BD	308.	4.30	25.	6.	5.	0.22
+	HYDROGRAPH AT	LN26B	196.	4.57	16.	4.	3.	0.22
+	4 COMBINED AT	CN27	2102.	4.53	379.	95.	69.	3.62
+	ROUTED TO	RN27	2077.	4.67	378.	95.	69.	3.62
+	HYDROGRAPH AT	N26	76.	4.13	5.	1.	1.	0.04
+	HYDROGRAPH AT	N26A	428.	4.37	56.	14.	10.	0.35
+	DIVERSION TO	LN26AD	428.	4.37	25.	6.	5.	0.35
+	HYDROGRAPH AT	LN26A	375.	4.50	31.	8.	6.	0.35
	3 COMBINED AT	CN26*	2210.	4.67	392.	99.	71.	4.01
+	HYDROGRAPH AT	N25R	288.	4.07	25.	6.	5.	0.09

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	ROUTED TO	RN25R	275.	4.13	25.	6.	5.	0.09
+	HYDROGRAPH AT	N25Q	87.	4.07	8.	2.	1.	0.03
+	ROUTED TO	RN25Q	82.	4.13	8.	2.	1.	0.03
+	HYDROGRAPH AT	N25P	497.	4.07	44.	11.	8.	0.17
+	ROUTED TO	RN25P	469.	4.13	44.	11.	8.	0.17
+	HYDROGRAPH AT	N25M	529.	4.10	56.	14.	10.	0.24
+	DIVERSION TO	LN25MD	529.	4.10	30.	8.	5.	0.24
+	HYDROGRAPH AT	LN25M	478.	4.17	25.	6.	5.	0.24
+	4 COMBINED AT	CN25M	1243.	4.17	101.	25.	18.	0.53
+	DIVERSION TO	N25MI	1062.	4.17	94.	24.	17.	0.53
+	HYDROGRAPH AT	DN25M	181.	4.17	7.	2.	1.	0.53
	ROUTED TO	RN25MW	126.	4.37	7.	2.	1.	0.53
+	HYDROGRAPH AT	N25N	48.	4.10	5.	1.	1.	0.03
+	DIVERSION TO	LN25ND	48.	4.10	3.	1.	1.	0.03
+	HYDROGRAPH AT	LN25N	33.	4.27	2.	0.	0.	0.03
+	ROUTED TO	RN25N	27.	4.37	2.	0.	0.	0.03
+	2 COMBINED AT	CX3	148.	4.37	9.	2.	2.	0.55
+	DIVERSION TO	X3I	81.	4.37	5.	1.	1.	0.55
+	HYDROGRAPH AT	DX3O	67.	4.37	4.	1.	1.	0.55
+	ROUTED TO	RX3W	41.	4.90	4.	1.	1.	0.55
+	2 COMBINED AT	CN26	2207.	4.67	394.	99.	72.	4.56
+	ROUTED TO	RN26	2099.	4.77	385.	97.	70.	4.56
	HYDROGRAPH AT	N25L	126.	4.13	10.	2.	2.	0.06
	DIVERSION TO							

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE
ROUTED TO	S-DET	328.	6.40	227.	153.	136.	10.63	
ROUTED TO	RDET	327.	6.43	227.	153.	136.	10.63	
ROUTED TO	RN11BS	326.	6.70	227.	153.	135.	10.63	
HYDROGRAPH AT	N11	1231.	4.30	223.	56.	40.	0.90	
HYDROGRAPH AT	DRV87	162.	5.50	41.	15.	12.	4.14	
ROUTED TO	RDV87S	161.	5.53	41.	15.	12.	4.14	
ROUTED TO	R-G1	159.	5.57	41.	15.	12.	4.14	
DIVERSION TO	DX55I	142.	5.47	40.	15.	12.	4.14	
HYDROGRAPH AT	DX55	19.	5.60	1.	0.	0.	4.14	
DIVERSION TO	DX56I	15.	5.60	1.	0.	0.	4.14	
HYDROGRAPH AT	DX56	4.	5.60	0.	0.	0.	4.14	
ROUTED TO	DX56W	1.	5.77	0.	0.	0.	4.14	
HYDROGRAPH AT	DRV89	135.	5.53	24.	6.	4.	4.14	
ROUTED TO	RDV89S	113.	5.70	24.	6.	4.	4.14	
ROUTED TO	RDV89E	96.	5.97	24.	6.	4.	4.14	
4 COMBINED AT	CN11	1231.	4.37	537.	237.	198.	11.53	
ROUTED TO	RN11	909.	4.57	401.	200.	171.	11.53	
HYDROGRAPH AT	N10	614.	4.30	115.	29.	21.	0.49	
HYDROGRAPH AT	S10R	37.	4.23	8.	2.	1.	0.03	
DIVERSION TO	S10RI	24.	4.23	4.	1.	1.	0.03	
HYDROGRAPH AT	DS10RO	13.	4.23	3.	1.	1.	0.03	
ROUTED TO	RS10RS	9.	4.70	3.	1.	1.	0.03	
3 COMBINED AT	CN10	1268.	4.53	484.	221.	188.	12.05	
DIVERSION TO	N10I	30.	4.50	2.	1.	0.	12.05	
HYDROGRAPH AT	DN10	1238.	4.53	482.	220.	188.	12.05	

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE
ROUTED TO	RN10E	1234.	4.63	482.	220.	187.	12.05	
HYDROGRAPH AT	DR56	15.	5.60	1.	0.	0.	4.14	
ROUTED TO	RDR56	3.	5.77	1.	0.	0.	4.14	
HYDROGRAPH AT	N09	1068.	4.23	170.	43.	31.	0.65	
3 COMBINED AT	CN09*	1742.	4.50	604.	254.	213.	12.70	
HYDROGRAPH AT	CN21	2955.	5.93	1306.	414.	321.	15.37	
ROUTED TO	RN21	2903.	6.17	1301.	414.	319.	15.37	
HYDROGRAPH AT	DRTONR	100.	4.70	76.	59.	50.	4.14	
HYDROGRAPH AT	N20	472.	4.27	83.	21.	15.	0.36	
3 COMBINED AT	CN20	3017.	6.17	1412.	484.	380.	15.73	
ROUTED TO	RN20	2988.	6.37	1411.	484.	376.	15.73	
HYDROGRAPH AT	N12	475.	4.50	123.	31.	23.	0.51	
DIVERSION TO	LN12D	16.	2.97	4.	1.	1.	0.51	
HYDROGRAPH AT	LN12	475.	4.50	121.	30.	22.	0.51	
HYDROGRAPH AT	N13	184.	5.10	112.	34.	25.	0.50	
3 COMBINED AT	CN12	3239.	5.57	1562.	529.	412.	16.73	
ROUTED TO	RN12	3221.	5.80	1561.	529.	410.	16.73	
2 COMBINED AT	CN09+	3331.	5.80	1938.	731.	587.	26.16	
ROUTED TO	RN09*	3320.	5.90	1937.	731.	585.	26.16	
HYDROGRAPH AT	N19E	726.	4.60	123.	31.	22.	0.70	
HYDROGRAPH AT	N19F	323.	4.63	58.	14.	10.	0.37	
2 COMBINED AT	CN19E	937.	4.63	169.	43.	31.	1.08	
ROUTED TO	RN19E	853.	4.80	169.	43.	31.	1.08	
HYDROGRAPH AT	N19D	575.	4.33	75.	19.	14.	0.39	
2 COMBINED AT	CN19D	1029.	4.70	230.	58.	42.	1.47	

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		N25BI	310.	4.80	64.	16.	12.	1.45
+	HYDROGRAPH AT	DN25B	517.	4.80	107.	27.	19.	1.45
+	ROUTED TO	RN25BW	509.	4.97	107.	27.	19.	1.45
+	HYDROGRAPH AT	N25A	117.	4.30	15.	4.	3.	0.09
+	2 COMBINED AT	CN25A	532.	4.93	119.	30.	22.	1.55
+	DIVERSION TO	N25AI	355.	4.93	83.	21.	15.	1.55
+	HYDROGRAPH AT	DN25A	178.	4.93	36.	9.	7.	1.55
+	HYDROGRAPH AT	N25	187.	4.50	29.	7.	5.	0.24
+	HYDROGRAPH AT	N25H	72.	4.30	10.	2.	2.	0.07
+	4 COMBINED AT	CN25	1981.	5.17	442.	112.	80.	6.85
+	ROUTED TO	RN25	1864.	5.47	441.	112.	80.	6.85
	HYDROGRAPH AT	N24B	129.	4.13	12.	3.	2.	0.07
+	HYDROGRAPH AT	DRN25D	247.	4.10	28.	7.	5.	0.20
+	ROUTED TO	RN25DS	205.	4.43	28.	7.	5.	0.20
+	2 COMBINED AT	CN24B	269.	4.37	41.	10.	7.	0.27
+	ROUTED TO	RN24B	266.	4.43	41.	10.	7.	0.27
+	HYDROGRAPH AT	DRN25C	154.	4.23	20.	5.	4.	0.37
+	ROUTED TO	RN25CS	149.	4.37	20.	5.	4.	0.37
+	2 COMBINED AT	CN24B*	393.	4.40	59.	15.	11.	0.64
+	DIVERSION TO	N24BI	0.	4.40	0.	0.	0.	0.64
+	HYDROGRAPH AT	DN24B*	393.	4.40	59.	15.	11.	0.64
+	ROUTED TO	RN24BW	390.	4.47	59.	15.	11.	0.64
	HYDROGRAPH AT	DRN25B	310.	4.80	64.	16.	12.	1.45
+	ROUTED TO	RN25BS	305.	4.93	64.	16.	12.	1.45

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	2 COMBINED AT	CN24C*	516.	4.60	115.	29.	21.	2.09
+	ROUTED TO	RN24C*	513.	4.67	115.	29.	21.	2.09
+	HYDROGRAPH AT	DRN25A	355.	4.93	83.	21.	15.	1.55
+	ROUTED TO	RN25AS	354.	5.00	83.	21.	15.	1.55
+	HYDROGRAPH AT	N24C	404.	4.10	38.	10.	7.	0.19
+	3 COMBINED AT	CN24C	782.	4.70	214.	54.	39.	3.73
+	ROUTED TO	RN24C	774.	4.83	214.	54.	39.	3.73
+	HYDROGRAPH AT	N24	153.	4.27	14.	4.	3.	0.11
+	HYDROGRAPH AT	N24A	356.	4.20	53.	13.	10.	0.24
+	DIVERSION TO	LN24AD	337.	4.13	17.	4.	3.	0.24
+	HYDROGRAPH AT	LN24A	356.	4.20	37.	9.	7.	0.24
	HYDROGRAPH AT	DRN24B	0.	4.40	0.	0.	0.	0.64
+	ROUTED TO	RN24BS	0.	4.53	0.	0.	0.	0.64
+	HYDROGRAPH AT	A21A	236.	4.07	19.	5.	3.	0.08
+	ROUTED TO	RA21A	213.	4.17	19.	5.	3.	0.08
+	2 COMBINED AT	X30	192.	4.17	19.	5.	3.	0.72
+	DIVERSION TO	X30I	29.	3.80	8.	2.	1.	0.72
+	HYDROGRAPH AT	DX30	164.	4.17	11.	3.	2.	0.72
+	ROUTED TO	RX30W	117.	4.30	11.	3.	2.	0.72
+	6 COMBINED AT	CN24	2138.	5.47	634.	169.	125.	10.60
+	ROUTED TO	RN24	2087.	5.63	633.	169.	124.	10.60
+	HYDROGRAPH AT	DRX30	29.	3.80	8.	2.	1.	0.72
	ROUTED TO	RX30S	26.	4.67	8.	2.	1.	0.72
	HYDROGRAPH AT							

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE
HYDROGRAPH AT	N15	546.	4.40	121.	31.	22.	0.54	
3 COMBINED AT	CN15	2138.	4.97	972.	319.	231.	8.01	
ROUTED TO	RN15	2124.	5.07	970.	319.	231.	8.01	
HYDROGRAPH AT	N14A	458.	4.40	102.	26.	19.	0.44	
ROUTED TO	RN14A	454.	4.50	102.	26.	19.	0.44	
HYDROGRAPH AT	N14	195.	4.07	24.	6.	4.	0.08	
3 COMBINED AT	CN14	2347.	5.03	1047.	344.	250.	8.53	
ROUTED TO	RN14	2299.	5.30	1034.	344.	249.	8.53	
HYDROGRAPH AT	N08B	750.	4.40	165.	42.	30.	0.70	
DIVERSION TO	LN08BD	750.	4.40	91.	23.	16.	0.70	
HYDROGRAPH AT	LN08B	550.	4.83	76.	19.	14.	0.70	
ROUTED TO	RN08B	389.	5.33	76.	19.	14.	0.70	
HYDROGRAPH AT	N08A	702.	4.43	174.	44.	32.	0.74	
DIVERSION TO	LN08AD	702.	4.43	93.	23.	17.	0.74	
HYDROGRAPH AT	LN08A	545.	4.87	84.	21.	15.	0.74	
2 COMBINED AT	CN08A	604.	5.50	149.	37.	27.	1.43	
ROUTED TO	RN08A	525.	5.70	148.	37.	27.	1.43	
HYDROGRAPH AT	N08	918.	4.30	183.	46.	33.	0.79	
3 COMBINED AT	CN08	2592.	5.33	1210.	401.	291.	10.75	
ROUTED TO	RN08	2588.	5.37	1209.	401.	291.	10.75	
2 COMBINED AT	CN09	4662.	5.80	2763.	1023.	801.	36.91	
ROUTED TO	RN09	4642.	5.93	2759.	1022.	797.	36.91	
HYDROGRAPH AT	DRN10	30.	4.50	2.	1.	0.	12.05	
ROUTED TO	RN10S	27.	4.63	2.	1.	0.	12.05	
DIVERSION TO	DX26I	21.	4.63	1.	0.	0.	12.05	

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE
HYDROGRAPH AT	DX26O	6.	4.70	1.	0.	0.	12.05	
ROUTED TO	RX26S	5.	5.33	1.	0.	0.	12.05	
HYDROGRAPH AT	DRX26	21.	4.63	1.	0.	0.	12.05	
HYDROGRAPH AT	N07A	809.	4.13	81.	20.	15.	0.36	
DIVERSION TO	LN07AD	809.	4.13	46.	11.	8.	0.36	
HYDROGRAPH AT	LN07A	723.	4.20	35.	9.	6.	0.36	
2 COMBINED AT	CN07A	806.	4.47	73.	18.	13.	0.36	
HYDROGRAPH AT	N07	962.	4.27	160.	40.	29.	0.75	
4 COMBINED AT	CN07	4658.	5.93	2818.	1044.	815.	38.15	
ROUTED TO	RN07	4650.	6.20	2814.	1044.	806.	38.15	
HYDROGRAPH AT	A11L	662.	4.20	62.	15.	11.	0.25	
ROUTED TO	RA11L	607.	4.37	62.	15.	11.	0.25	
HYDROGRAPH AT	A11M	722.	4.10	55.	14.	10.	0.26	
ROUTED TO	RA11M	670.	4.20	55.	14.	10.	0.26	
HYDROGRAPH AT	A11J	181.	4.17	16.	4.	3.	0.08	
HYDROGRAPH AT	A11N	210.	4.10	14.	4.	3.	0.08	
ROUTED TO	RA11N	200.	4.13	14.	4.	3.	0.08	
HYDROGRAPH AT	A11O	146.	4.07	10.	2.	2.	0.06	
ROUTED TO	RA11O	136.	4.17	10.	2.	2.	0.06	
2 COMBINED AT	CX21	334.	4.17	24.	6.	4.	0.14	
ROUTED TO	RX21	290.	4.33	24.	6.	4.	0.14	
HYDROGRAPH AT	A11K	777.	4.10	46.	12.	8.	0.30	
HYDROGRAPH AT	A11G	189.	4.03	13.	3.	2.	0.07	
DIVERSION TO	A11GI	0.	4.03	0.	0.	0.	0.07	
HYDROGRAPH AT	DA11G	189.	4.03	13.	3.	2.	0.07	

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		A21JRR	583.	4.13	66.	17.	12.	0.32
+	ROUTED TO	RA21J	562.	4.20	66.	17.	12.	0.32
+	HYDROGRAPH AT	A21N	733.	4.03	55.	14.	10.	0.26
+	4 COMBINED AT	CA21N	1154.	4.10	210.	108.	99.	0.75
+	ROUTED TO	A21NRR	1110.	4.20	208.	108.	96.	0.75
+	HYDROGRAPH AT	A21O	34.	4.03	3.	1.	1.	0.01
+	2 COMBINED AT	CA21O	1120.	4.20	211.	108.	97.	0.76
+	ROUTED TO	A21ORR	886.	4.27	211.	108.	97.	0.76
+	HYDROGRAPH AT	A21U	357.	4.07	32.	8.	6.	0.14
+	DIVERSION TO	A21UR	64.	3.70	4.	1.	1.	0.14
+	HYDROGRAPH AT	LA21U	357.	4.07	28.	7.	5.	0.14
	2 COMBINED AT	CA21U	1021.	4.23	236.	115.	101.	0.90
+	ROUTED TO	A21URR	546.	4.80	233.	114.	99.	0.90
+	DIVERSION TO	DA21US	15.	1.33	15.	15.	15.	0.90
+	HYDROGRAPH AT	DA21U	531.	4.80	218.	99.	84.	0.90
+	HYDROGRAPH AT	N21A36	21.	4.13	3.	1.	0.	0.02
+	HYDROGRAPH AT	N21AP3	11.	4.13	2.	1.	0.	0.01
+	3 COMBINED AT	C21AP3	538.	4.77	222.	100.	84.	0.92
+	ROUTED TO	L21AP3	537.	4.83	222.	100.	84.	0.92
+	HYDROGRAPH AT	N21A25	11.	4.03	1.	0.	0.	0.00
+	ROUTED TO	R21A25	11.	4.10	1.	0.	0.	0.00
+	HYDROGRAPH AT	N21A24	10.	4.17	2.	0.	0.	0.02
	HYDROGRAPH AT	N21A26	25.	4.20	4.	1.	1.	0.03
+	HYDROGRAPH AT	N21A27	2.	4.17	0.	0.	0.	0.00

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	4 COMBINED AT	C21A27	47.	4.17	8.	2.	1.	0.05
+	ROUTED TO	L21A27	33.	4.43	5.	2.	1.	0.05
+	HYDROGRAPH AT	N21A23	26.	4.20	4.	1.	1.	0.03
+	ROUTED TO	R21A23	25.	4.33	4.	1.	1.	0.03
+	HYDROGRAPH AT	N21A28	1.	4.93	0.	0.	0.	0.01
+	HYDROGRAPH AT	N21A29	13.	4.23	3.	1.	1.	0.02
+	4 COMBINED AT	C21A28	68.	4.43	12.	4.	3.	0.10
+	ROUTED TO	L2A281	58.	4.53	9.	3.	2.	0.10
+	ROUTED TO	L2A282	38.	4.80	9.	5.	5.	0.10
+	HYDROGRAPH AT	N21A32	2.	4.20	0.	0.	0.	0.00
+	2 COMBINED AT	C21A32	39.	4.80	9.	5.	5.	0.11
	ROUTED TO	L2A283	39.	4.80	9.	5.	5.	0.11
+	HYDROGRAPH AT	N21A31	24.	4.10	3.	1.	1.	0.02
+	HYDROGRAPH AT	N21A33	35.	4.23	6.	2.	1.	0.04
+	3 COMBINED AT	C21A33	61.	4.17	17.	7.	6.	0.16
+	HYDROGRAPH AT	N21A22	8.	4.17	2.	1.	0.	0.01
+	HYDROGRAPH AT	DRN23A	202.	4.13	20.	5.	4.	1.13
+	ROUTED TO	RN23AS	160.	4.77	20.	5.	4.	1.13
+	2 COMBINED AT	C21A22	196.	4.73	24.	6.	4.	0.01
+	DIVERSION TO	21A22I	194.	4.73	22.	5.	4.	0.01
+	HYDROGRAPH AT	D21A22	3.	3.77	2.	1.	0.	0.01
+	HYDROGRAPH AT	N21A30	25.	4.17	4.	1.	1.	0.02
	HYDROGRAPH AT	N21AP1	9.	4.63	4.	1.	1.	0.02
	4 COMBINED AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		C21AP1	94.	4.20	27.	10.	8.	0.21
+	ROUTED TO	L21AP1	56.	5.10	26.	10.	8.	0.21
+	HYDROGRAPH AT	N21AP2	21.	4.13	3.	1.	0.	0.01
+	2 COMBINED AT	C21AP2	58.	5.07	29.	10.	9.	0.22
+	ROUTED TO	L21AP2	58.	5.07	29.	10.	9.	0.22
+	HYDROGRAPH AT	N21A37	18.	4.13	2.	1.	0.	0.01
+	3 COMBINED AT	C21APA	574.	4.83	245.	109.	92.	1.16
+	HYDROGRAPH AT	N21A34	22.	4.10	3.	1.	0.	0.02
+	HYDROGRAPH AT	N21A35	19.	4.10	2.	0.	0.	0.01
+	HYDROGRAPH AT	N21AP5	13.	4.10	2.	0.	0.	0.01
+	ROUTED TO	L21AP5	1.	4.97	1.	0.	0.	0.01
	HYDROGRAPH AT	N21AP4	40.	4.20	7.	2.	1.	0.03
+	5 COMBINED AT	C21APB	591.	4.80	253.	111.	94.	1.23
+	ROUTED TO	L21AP4	555.	5.17	253.	111.	93.	1.23
+	HYDROGRAPH AT	N21A39	8.	4.37	3.	1.	1.	0.01
+	HYDROGRAPH AT	DR2122	194.	4.73	22.	5.	4.	0.01
+	ROUTED TO	R21A22	172.	4.97	22.	5.	4.	0.01
+	3 COMBINED AT	C21A39	695.	5.03	275.	117.	97.	1.24
+	ROUTED TO	R21A39	694.	5.07	275.	117.	97.	1.24
+	HYDROGRAPH AT	N21A40	45.	4.23	8.	2.	1.	0.05
+	2 COMBINED AT	C21A40	701.	5.07	280.	118.	98.	1.29
+	HYDROGRAPH AT	N21A41	27.	4.20	5.	1.	1.	0.03
	HYDROGRAPH AT	N21A42	21.	4.20	3.	1.	1.	0.02
+	HYDROGRAPH AT	N21A43	5.	4.10	0.	0.	0.	0.00

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	4 COMBINED AT	C21A42	709.	5.07	285.	119.	99.	1.34
+	ROUTED TO	L21A43	724.	5.07	285.	119.	98.	1.34
+	HYDROGRAPH AT	A21P	79.	4.10	10.	2.	2.	0.04
+	ROUTED TO	A21PRR	16.	3.93	9.	2.	2.	0.04
+	ROUTED TO	RA21P	16.	4.00	9.	2.	2.	0.04
+	HYDROGRAPH AT	A21V	116.	4.03	8.	2.	2.	0.04
+	DIVERSION TO	A21VR	116.	4.03	8.	2.	2.	0.04
+	HYDROGRAPH AT	LA21V	0.	0.03	0.	0.	0.	0.04
+	HYDROGRAPH AT	A21Q	71.	4.10	10.	3.	2.	0.04
+	3 COMBINED AT	CA21Q	87.	4.10	19.	5.	4.	0.11
+	ROUTED TO	A21QRR	81.	4.20	19.	5.	4.	0.11
	HYDROGRAPH AT	A21R	22.	4.03	2.	1.	0.	0.01
+	2 COMBINED AT	CA21R	95.	4.13	21.	5.	4.	0.12
+	ROUTED TO	A21RRR	91.	4.23	21.	5.	4.	0.12
+	HYDROGRAPH AT	A21S	37.	4.07	4.	1.	1.	0.01
+	2 COMBINED AT	CA21S	116.	4.17	25.	6.	5.	0.14
+	ROUTED TO	A21SRR	113.	4.23	25.	6.	5.	0.14
+	HYDROGRAPH AT	A21T	107.	4.03	10.	2.	2.	0.04
+	2 COMBINED AT	CA21T	187.	4.10	34.	9.	6.	0.18
+	ROUTED TO	A21TRR	20.	6.27	17.	9.	6.	0.18
+	ROUTED TO	RA21T	20.	6.30	17.	9.	6.	0.18
+	HYDROGRAPH AT	A21AE	156.	4.00	12.	3.	2.	0.05
	DIVERSION TO	A21AER	149.	3.97	7.	2.	1.	0.05
	HYDROGRAPH AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		LA21AE	155.	4.03	5.	1.	1.	0.05
+	HYDROGRAPH AT	A21AF	12.	4.03	1.	0.	0.	0.00
+	DIVERSION TO	A21AFR	12.	4.03	1.	0.	0.	0.00
+	HYDROGRAPH AT	LA21AF	6.	4.17	0.	0.	0.	0.00
+	HYDROGRAPH AT	A21X	41.	4.07	4.	1.	1.	0.02
+	DIVERSION TO	A21XR	41.	4.07	4.	1.	1.	0.02
+	HYDROGRAPH AT	LA21X	0.	0.03	0.	0.	0.	0.02
+	HYDROGRAPH AT	A21W	31.	4.07	3.	1.	0.	0.02
+	DIVERSION TO	A21WR	31.	4.07	3.	1.	0.	0.02
+	HYDROGRAPH AT	LA21W	0.	0.03	0.	0.	0.	0.02
+	5 COMBINED AT	CA21AE	171.	4.03	22.	10.	7.	0.27
	HYDROGRAPH AT	A21Y	142.	4.03	13.	3.	2.	0.05
+	DIVERSION TO	A21YR	142.	4.03	7.	2.	1.	0.05
+	HYDROGRAPH AT	LA21Y	130.	4.10	6.	1.	1.	0.05
+	HYDROGRAPH AT	A21Z	184.	4.03	15.	4.	3.	0.06
+	DIVERSION TO	A21ZR	184.	4.03	9.	2.	2.	0.06
+	HYDROGRAPH AT	LA21Z	141.	4.13	6.	2.	1.	0.06
+	ROUTED TO	RA21Z	122.	4.17	6.	2.	1.	0.06
+	HYDROGRAPH AT	A21AB	118.	4.03	11.	3.	2.	0.04
+	DIVERSION TO	A21ABR	118.	4.03	7.	2.	1.	0.04
+	HYDROGRAPH AT	LA21AB	95.	4.10	4.	1.	1.	0.04
+	3 COMBINED AT	CA21AB	286.	4.17	15.	4.	3.	0.15
	ROUTED TO	RA21AB	242.	4.20	15.	4.	3.	0.15
+	HYDROGRAPH AT	A21AC	77.	4.00	7.	2.	1.	0.02

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	DIVERSION TO	A21ACR	77.	4.00	5.	1.	1.	0.02
+	HYDROGRAPH AT	LA21AC	65.	4.07	2.	1.	0.	0.02
+	HYDROGRAPH AT	A21AA	37.	4.00	3.	1.	1.	0.01
+	DIVERSION TO	A21AAR	33.	3.93	2.	0.	0.	0.01
+	HYDROGRAPH AT	LA21AA	37.	4.00	1.	0.	0.	0.01
+	HYDROGRAPH AT	A21AD	140.	4.07	14.	4.	3.	0.05
+	DIVERSION TO	A21ADR	140.	4.07	8.	2.	1.	0.05
+	HYDROGRAPH AT	LA21AD	126.	4.13	7.	2.	1.	0.05
+	4 COMBINED AT	CA21AD	383.	4.17	25.	6.	5.	0.24
+	ROUTED TO	RA21AD	345.	4.23	24.	6.	4.	0.24
+	2 COMBINED AT	A21AEC	408.	4.20	46.	16.	12.	0.51
	ROUTED TO	RA21AE	379.	4.23	46.	16.	12.	0.51
+	HYDROGRAPH AT	A21AG	95.	4.03	7.	2.	1.	0.03
+	DIVERSION TO	A21AGR	94.	4.00	5.	1.	1.	0.03
+	HYDROGRAPH AT	LA21AG	87.	4.07	3.	1.	0.	0.03
+	2 COMBINED AT	CA21AG	401.	4.23	48.	17.	12.	0.54
+	ROUTED TO	RA21AG	386.	4.27	48.	17.	12.	0.54
+	HYDROGRAPH AT	A21AH	75.	4.03	6.	1.	1.	0.03
+	DIVERSION TO	A21AHR	75.	4.03	4.	1.	1.	0.03
+	HYDROGRAPH AT	LA21AH	57.	4.10	2.	1.	0.	0.03
+	HYDROGRAPH AT	A21AI	21.	4.03	2.	0.	0.	0.01
+	DIVERSION TO	A21AIR	21.	4.03	1.	0.	0.	0.01
	HYDROGRAPH AT	LA21AI	16.	4.10	1.	0.	0.	0.01
	HYDROGRAPH AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		A21AJ	28.	4.03	3.	1.	0.	0.01
+	DIVERSION TO	A21AIR	28.	4.03	2.	1.	0.	0.01
+	HYDROGRAPH AT	LA21AI	8.	4.40	0.	0.	0.	0.01
+	3 COMBINED AT	CA21AJ	72.	4.10	3.	1.	1.	0.04
+	HYDROGRAPH AT	A21AK	141.	4.03	13.	3.	2.	0.04
+	DIVERSION TO	A21AKR	141.	4.03	9.	2.	2.	0.04
+	HYDROGRAPH AT	LA21AK	106.	4.10	4.	1.	1.	0.04
+	HYDROGRAPH AT	DA21US	15.	1.33	15.	15.	15.	0.90
+	ROUTED TO	RA21US	15.	1.53	15.	15.	15.	0.90
+	HYDROGRAPH AT	N21A38	23.	4.17	4.	1.	1.	0.02
+	ROUTED TO	L21A38	17.	4.43	2.	1.	0.	0.02
	ROUTED TO	R21A38	15.	4.73	2.	1.	0.	0.02
+	5 COMBINED AT	CN21B	444.	4.27	71.	33.	28.	0.65
+	ROUTED TO	RN21B	434.	4.30	71.	33.	28.	0.65
+	HYDROGRAPH AT	N21A44	38.	4.13	6.	1.	1.	0.03
+	ROUTED TO	L21A44	0.	0.03	0.	0.	0.	0.03
+	ROUTED TO	R21A44	0.	0.03	0.	0.	0.	0.03
+	HYDROGRAPH AT	N21A90	8.	4.43	3.	1.	1.	0.01
+	4 COMBINED AT	C21A43	790.	5.00	343.	149.	123.	2.03
+	ROUTED TO	R21A43	775.	5.13	343.	149.	123.	2.03
+	HYDROGRAPH AT	N21A19	9.	4.10	1.	0.	0.	0.01
+	HYDROGRAPH AT	N21A91	6.	4.20	2.	0.	0.	0.00
	3 COMBINED AT	C21A91	777.	5.13	345.	150.	123.	2.04
+	ROUTED TO	R21A91	776.	5.17	345.	150.	123.	2.04

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	HYDROGRAPH AT	N21A4	12.	4.10	1.	0.	0.	0.01
+	DIVERSION TO	21A4I	5.	4.10	1.	0.	0.	0.01
+	HYDROGRAPH AT	D21A4	7.	4.10	1.	0.	0.	0.01
+	HYDROGRAPH AT	N21A2	11.	4.13	1.	0.	0.	0.01
+	HYDROGRAPH AT	N21A3	17.	4.13	3.	1.	0.	0.02
+	3 COMBINED AT	C21A3	36.	4.13	5.	1.	1.	0.03
+	ROUTED TO	R21A3	34.	4.20	5.	1.	1.	0.03
+	HYDROGRAPH AT	N21A1	38.	4.10	5.	1.	1.	0.02
+	ROUTED TO	R21A1	37.	4.20	5.	1.	1.	0.02
+	HYDROGRAPH AT	N21A5	5.	4.30	1.	0.	0.	0.01
+	3 COMBINED AT	C21A5	76.	4.20	11.	3.	2.	0.07
	ROUTED TO	R21A5	75.	4.27	11.	3.	2.	0.07
+	HYDROGRAPH AT	DR21A4	5.	4.10	1.	0.	0.	0.01
+	ROUTED TO	R21A4	5.	4.20	1.	0.	0.	0.01
+	HYDROGRAPH AT	N21A6	29.	4.10	3.	1.	1.	0.02
+	2 COMBINED AT	C21A6	33.	4.13	4.	1.	1.	0.02
+	ROUTED TO	R21A6	32.	4.20	4.	1.	1.	0.02
+	HYDROGRAPH AT	N21A7	19.	4.10	2.	1.	0.	0.01
+	ROUTED TO	R21A7	16.	4.43	2.	1.	0.	0.01
+	HYDROGRAPH AT	N21A8	0.	0.03	0.	0.	0.	0.01
+	4 COMBINED AT	C21A8	116.	4.27	17.	4.	3.	0.11
+	ROUTED TO	L21A8	3.	6.27	3.	2.	2.	0.11
	ROUTED TO	R21A8	3.	6.43	3.	2.	2.	0.11
	HYDROGRAPH AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		N21A9	33.	4.13	4.	1.	1.	0.03
+	ROUTED TO	R21A9	31.	4.27	4.	1.	1.	0.03
+	HYDROGRAPH AT	N21A10	60.	4.13	7.	2.	1.	0.05
+	HYDROGRAPH AT	N21A11	9.	4.23	2.	0.	0.	0.01
+	HYDROGRAPH AT	N21A12	12.	4.17	2.	1.	0.	0.01
+	5 COMBINED AT	C21A11	108.	4.20	17.	6.	5.	0.21
+	ROUTED TO	L21A11	78.	4.53	17.	6.	5.	0.21
+	ROUTED TO	L21A14	51.	4.63	17.	6.	5.	0.21
+	ROUTED TO	R21A11	50.	4.63	17.	6.	5.	0.21
+	HYDROGRAPH AT	N21A14	30.	4.37	6.	2.	1.	0.06
+	2 COMBINED AT	C21A14	76.	4.63	23.	7.	6.	0.27
	HYDROGRAPH AT	N21A13	28.	4.13	3.	1.	1.	0.02
+	HYDROGRAPH AT	N21A15	17.	4.13	2.	1.	0.	0.01
+	3 COMBINED AT	C21A15	91.	4.60	28.	9.	7.	0.30
+	ROUTED TO	L21A15	68.	4.87	28.	9.	7.	0.30
+	HYDROGRAPH AT	N21A17	6.	4.27	1.	0.	0.	0.01
+	ROUTED TO	L21A17	5.	4.60	1.	0.	0.	0.01
+	2 COMBINED AT	C21A17	72.	4.83	29.	9.	7.	0.32
+	HYDROGRAPH AT	N21A16	22.	4.20	4.	1.	1.	0.02
+	ROUTED TO	L21A16	22.	4.20	13.	12.	12.	0.02
+	2 COMBINED AT	C21A16	84.	4.83	42.	21.	19.	0.34
+	ROUTED TO	R21A16	84.	4.90	42.	21.	19.	0.34
	HYDROGRAPH AT	N21A20	2.	4.17	0.	0.	0.	0.00
+	2 COMBINED AT	C21A20	85.	4.90	42.	21.	19.	0.34

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	ROUTED TO	L21A20	85.	4.90	42.	21.	19.	0.34
+	HYDROGRAPH AT	N21A18	27.	4.20	4.	1.	1.	0.03
+	2 COMBINED AT	C21A18	94.	4.83	46.	22.	20.	0.37
+	ROUTED TO	R21A18	94.	4.87	46.	22.	20.	0.37
+	HYDROGRAPH AT	N21A21	28.	4.10	3.	1.	1.	0.02
+	ROUTED TO	L21A21	11.	4.50	2.	1.	0.	0.02
+	HYDROGRAPH AT	N21A92	5.	4.30	2.	0.	0.	0.01
+	4 COMBINED AT	CN21A	776.	5.20	361.	164.	137.	3.72
+	ROUTED TO	RN21A	773.	5.27	361.	164.	136.	3.72
+	HYDROGRAPH AT	N21	626.	4.40	132.	33.	24.	0.62
+	4 COMBINED AT	CN21	2955.	5.93	1306.	414.	321.	15.37
	HYDROGRAPH AT	A09U	454.	4.10	31.	8.	6.	0.17
+	DIVERSION TO	A09UI	91.	4.10	6.	2.	1.	0.17
+	HYDROGRAPH AT	DA09U	364.	4.10	25.	6.	4.	0.17
+	ROUTED TO	RA09US	309.	4.33	25.	6.	4.	0.17
+	HYDROGRAPH AT	N11N	700.	4.03	42.	11.	8.	0.26
+	DIVERSION TO	N11NI	661.	4.03	39.	10.	7.	0.26
+	HYDROGRAPH AT	DN11N	39.	4.03	3.	1.	1.	0.26
+	ROUTED TO	RN11NW	32.	4.57	3.	1.	1.	0.26
+	HYDROGRAPH AT	N11O	119.	4.13	8.	2.	1.	0.05
+	DIVERSION TO	N11OI	12.	4.13	1.	0.	0.	0.05
+	HYDROGRAPH AT	DN11O	107.	4.13	7.	2.	1.	0.05
	ROUTED TO	RN11OS	85.	4.50	7.	2.	1.	0.05
	HYDROGRAPH AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		N11M	234.	4.13	14.	3.	2.	0.10
+	4 COMBINED AT	CN11M	410.	4.27	48.	12.	9.	0.32
+	DIVERSION TO	N11MI	102.	4.27	12.	3.	2.	0.32
+	HYDROGRAPH AT	DN11M	307.	4.27	36.	9.	7.	0.32
+	ROUTED TO	RN11MS	294.	4.53	36.	9.	7.	0.32
+	HYDROGRAPH AT	N11K	301.	4.17	31.	8.	6.	0.19
+	DIVERSION TO	LN11KD	50.	3.83	2.	1.	0.	0.19
+	HYDROGRAPH AT	LN11K	301.	4.17	29.	7.	5.	0.19
+	HYDROGRAPH AT	DRN11N	661.	4.03	39.	10.	7.	0.26
+	ROUTED TO	RN11NS	546.	4.23	39.	10.	7.	0.26
+	2 COMBINED AT	CN11K	823.	4.20	68.	17.	12.	0.45
	DIVERSION TO	N11KI	797.	4.20	66.	17.	12.	0.45
+	HYDROGRAPH AT	DN11K	26.	4.20	2.	0.	0.	0.45
+	ROUTED TO	RN11KW	17.	4.60	2.	0.	0.	0.45
+	HYDROGRAPH AT	N11J	492.	4.10	40.	10.	7.	0.24
+	DIVERSION TO	LN11JD	102.	3.83	4.	1.	1.	0.24
+	HYDROGRAPH AT	LN11J	492.	4.10	37.	9.	7.	0.24
+	3 COMBINED AT	CN11J	518.	4.13	74.	18.	13.	0.56
+	DIVERSION TO	N11JI	30.	4.10	8.	2.	1.	0.56
+	HYDROGRAPH AT	DN11J	488.	4.13	66.	17.	12.	0.56
+	ROUTED TO	RN11JS	442.	4.57	66.	17.	12.	0.56
+	HYDROGRAPH AT	N11G	716.	4.37	73.	18.	13.	0.52
	2 COMBINED AT	CN11G	851.	4.50	125.	31.	22.	1.08
+	DIVERSION TO	N11GI	0.	4.43	0.	0.	0.	1.08

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	HYDROGRAPH AT	DN11G	851.	4.50	125.	31.	22.	1.08
+	ROUTED TO	RN11GS	779.	4.80	125.	31.	22.	1.08
+	HYDROGRAPH AT	N11F	452.	4.23	35.	9.	6.	0.24
+	2 COMBINED AT	CN11F	792.	4.77	151.	38.	27.	1.33
+	ROUTED TO	RN11F	782.	4.93	151.	38.	27.	1.33
+	HYDROGRAPH AT	N11C	398.	4.20	51.	13.	9.	0.25
+	DIVERSION TO	LN11CD	398.	4.20	26.	6.	5.	0.25
+	HYDROGRAPH AT	LN11C	339.	4.33	25.	6.	5.	0.25
+	2 COMBINED AT	CN11C	825.	4.90	167.	42.	30.	1.58
+	DIVERSION TO	N11CWI	75.	4.87	9.	2.	2.	1.58
+	HYDROGRAPH AT	DN11CW	750.	4.90	158.	40.	29.	1.58
	DIVERSION TO	N11CEI	26.	4.87	10.	3.	2.	1.58
+	HYDROGRAPH AT	DN11CE	724.	4.90	148.	37.	27.	1.58
+	HYDROGRAPH AT	DRN11C	75.	4.87	9.	2.	2.	1.58
+	ROUTED TO	LN11CW	3.	5.50	2.	2.	1.	1.58
+	HYDROGRAPH AT	DR11C*	26.	4.87	10.	3.	2.	1.58
+	ROUTED TO	LN11CE	4.	8.57	4.	3.	2.	1.58
+	3 COMBINED AT	CN11C*	729.	4.90	154.	41.	30.	1.58
+	HYDROGRAPH AT	DRN11K	797.	4.20	66.	17.	12.	0.45
+	ROUTED TO	RN11KS	635.	4.70	66.	17.	12.	0.45
+	DIVERSION TO	X5I	585.	4.70	57.	14.	10.	0.45
+	HYDROGRAPH AT	DX5	50.	4.57	9.	2.	2.	0.45
	ROUTED TO	RX5W	50.	5.00	9.	2.	2.	0.45
	HYDROGRAPH AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		N11H	603.	4.37	64.	16.	11.	0.44
+	2 COMBINED AT	CN11H	518.	4.37	67.	17.	12.	0.89
+	ROUTED TO	RN11HW	442.	4.80	67.	17.	12.	0.89
+	HYDROGRAPH AT	N11D	662.	4.23	98.	25.	18.	0.51
+	DIVERSION TO	LN11DD	662.	4.23	63.	16.	11.	0.51
+	HYDROGRAPH AT	LN11D	420.	4.60	36.	9.	6.	0.51
+	2 COMBINED AT	LN11D*	642.	4.83	90.	22.	16.	1.40
+	HYDROGRAPH AT	DRX5	585.	4.70	57.	14.	10.	0.45
+	ROUTED TO	RX5S	494.	5.07	57.	14.	10.	0.45
+	HYDROGRAPH AT	N11I	1112.	4.17	133.	33.	24.	0.62
+	HYDROGRAPH AT	DRN11L	679.	4.33	58.	15.	10.	0.68
	ROUTED TO	RN11LS	588.	4.60	58.	15.	10.	0.68
+	HYDROGRAPH AT	DRN22A	109.	4.23	13.	3.	2.	0.37
+	ROUTED TO	RN22AW	100.	4.50	13.	3.	2.	0.37
+	3 COMBINED AT	CN11I	1071.	4.53	192.	48.	35.	1.30
+	DIVERSION TO	N11II	489.	4.20	90.	23.	16.	1.30
+	HYDROGRAPH AT	DN11I	489.	4.20	90.	23.	16.	1.30
+	ROUTED TO	RN11IS	478.	4.33	90.	23.	16.	1.30
+	HYDROGRAPH AT	DRN11I	489.	4.20	90.	23.	16.	1.30
+	ROUTED TO	RN11IW	478.	4.43	90.	23.	16.	1.30
+	2 COMBINED AT	CX50	943.	4.40	180.	45.	33.	1.30
+	ROUTED TO	LX50	902.	4.70	264.	174.	166.	1.30
	DIVERSION TO	DX50I	651.	4.70	219.	159.	153.	1.30
+	HYDROGRAPH AT	DX50	251.	4.70	44.	15.	12.	1.30

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE
2 COMBINED AT	CS10B	743.	4.30	241.	61.	44.	0.14	
ROUTED TO	RS10B	739.	4.37	241.	61.	44.	0.14	
HYDROGRAPH AT	S10A	46.	4.30	11.	3.	2.	0.05	
HYDROGRAPH AT	S10	149.	4.27	29.	7.	5.	0.11	
4 COMBINED AT	CS10	4032.	4.83	1247.	323.	233.	13.87	
ROUTED TO	RS10	4030.	4.83	1247.	323.	233.	13.87	
HYDROGRAPH AT	N06	952.	4.20	135.	34.	25.	0.59	
4 COMBINED AT	CN06	5701.	5.20	3517.	1263.	976.	52.61	
ROUTED TO	RN06	5682.	5.27	3509.	1263.	975.	52.61	
HYDROGRAPH AT	N05C	357.	4.27	60.	15.	11.	0.28	
2 COMBINED AT	CN05C	5728.	5.27	3532.	1270.	981.	52.89	
ROUTED TO	RN05C	5705.	5.37	3522.	1270.	979.	52.89	
HYDROGRAPH AT	N05B	221.	4.53	69.	18.	13.	0.31	
DIVERSION TO	DN05BI	199.	4.53	62.	16.	12.	0.31	
HYDROGRAPH AT	DN05B	22.	4.53	7.	2.	1.	0.31	
ROUTED TO	RN05BE	22.	4.67	7.	2.	1.	0.31	
HYDROGRAPH AT	N05A	330.	4.17	41.	10.	7.	0.17	
HYDROGRAPH AT	N05	393.	4.27	73.	18.	13.	0.28	
4 COMBINED AT	CN05	5779.	5.33	3561.	1287.	992.	53.65	
ROUTED TO	RN05	5775.	5.43	3559.	1287.	990.	53.65	
HYDROGRAPH AT	DN05BX	199.	4.53	62.	16.	12.	0.31	
ROUTED TO	RN05BS	198.	4.70	62.	16.	12.	0.31	
HYDROGRAPH AT	N04A	101.	4.17	17.	4.	3.	0.07	
3 COMBINED AT	CN04A	5869.	5.43	3599.	1299.	1000.	53.72	
ROUTED TO	RN04A	5832.	5.57	3586.	1299.	997.	53.72	

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE
HYDROGRAPH AT	N04	1090.	4.30	198.	50.	36.	0.83	
DIVERSION TO	LN04D	426.	3.97	31.	8.	6.	0.83	
HYDROGRAPH AT	LN04	1090.	4.30	168.	42.	30.	0.83	
2 COMBINED AT	CN04	5938.	5.53	3648.	1323.	1014.	54.54	
ROUTED TO	RN04	5936.	5.53	3647.	1323.	1014.	54.54	
HYDROGRAPH AT	S01G	469.	4.23	74.	18.	13.	0.28	
ROUTED TO	RS01G	446.	4.53	74.	18.	13.	0.28	
HYDROGRAPH AT	S01D	569.	4.43	138.	35.	25.	0.63	
2 COMBINED AT	CS01D	941.	4.53	207.	52.	38.	0.91	
ROUTED TO	RS01D	925.	4.70	207.	52.	38.	0.91	
HYDROGRAPH AT	S01H	329.	4.33	69.	17.	13.	0.32	
ROUTED TO	RS01H	323.	4.53	69.	17.	13.	0.32	
HYDROGRAPH AT	S01E	342.	4.20	49.	12.	9.	0.23	
2 COMBINED AT	CS01E	575.	4.40	117.	30.	21.	0.55	
ROUTED TO	RS01E	566.	4.53	117.	30.	21.	0.55	
HYDROGRAPH AT	S01C	526.	4.30	93.	23.	17.	0.40	
3 COMBINED AT	CS01C	1599.	4.67	390.	99.	72.	1.87	
ROUTED TO	RS01C	1596.	4.70	390.	99.	72.	1.87	
HYDROGRAPH AT	S01I	333.	4.23	54.	14.	10.	0.23	
ROUTED TO	RS01I	323.	4.37	54.	14.	10.	0.23	
HYDROGRAPH AT	S01F	184.	4.23	30.	7.	5.	0.15	
2 COMBINED AT	CS01F	494.	4.33	83.	21.	15.	0.38	
ROUTED TO	RS01F	483.	4.53	83.	21.	15.	0.38	
HYDROGRAPH AT	S01B	468.	4.23	73.	18.	13.	0.31	
3 COMBINED AT	CS01B	2085.	4.67	522.	133.	96.	2.56	

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE
ROUTED TO	RS01B	2077.	4.73	522.	133.	96.	2.56	
HYDROGRAPH AT	S01A	342.	4.33	71.	18.	13.	0.35	
2 COMBINED AT	CS01A	2254.	4.73	578.	147.	106.	2.91	
ROUTED TO	RS01A	2244.	4.77	578.	147.	106.	2.91	
HYDROGRAPH AT	S01	221.	4.40	56.	14.	10.	0.26	
2 COMBINED AT	CS01	2374.	4.77	623.	159.	115.	3.16	
ROUTED TO	RS01	2373.	4.77	623.	159.	115.	3.16	
2 COMBINED AT	CN03*	6767.	5.40	3977.	1419.	1087.	57.71	
ROUTED TO	RN03*	6751.	5.57	3974.	1418.	1081.	57.71	
HYDROGRAPH AT	N03A	351.	4.40	82.	21.	15.	0.39	
ROUTED TO	RN03A	347.	4.50	82.	21.	15.	0.39	
HYDROGRAPH AT	N03B	723.	4.40	146.	37.	26.	0.63	
ROUTED TO	RN03B	720.	4.43	146.	37.	26.	0.63	
HYDROGRAPH AT	N03	464.	4.50	119.	30.	22.	0.60	
4 COMBINED AT	CN03	7052.	5.53	4115.	1464.	1116.	59.33	
ROUTED TO	RN03	7041.	5.60	4111.	1464.	1115.	59.33	
HYDROGRAPH AT	N02B	183.	4.27	30.	8.	6.	0.15	
DIVERSION TO	LN02BD	153.	4.17	7.	2.	1.	0.15	
HYDROGRAPH AT	LN02B	183.	4.27	23.	6.	4.	0.15	
2 COMBINED AT	CN02B	7050.	5.60	4117.	1466.	1116.	59.48	
ROUTED TO	RN02B	7044.	5.67	4112.	1466.	1114.	59.48	
HYDROGRAPH AT	N02	994.	4.47	150.	37.	27.	0.76	
HYDROGRAPH AT	N02A	361.	4.20	35.	9.	6.	0.18	
3 COMBINED AT	CN02	7092.	5.67	4150.	1486.	1130.	60.42	
HYDROGRAPH AT	S20A	247.	4.23	44.	11.	8.	0.16	

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		DV91I	160.	5.57	38.	10.	7.	4.14
+	HYDROGRAPH AT	DV91	118.	5.57	104.	96.	86.	4.14
+	HYDROGRAPH AT	WB9	627.	4.10	71.	18.	13.	0.28
+	ROUTED TO	R-R10	331.	4.37	23.	6.	4.	0.28
+	HYDROGRAPH AT	DRIX1	613.	5.03	80.	20.	14.	2.24
+	ROUTED TO	RX1S	567.	5.33	80.	20.	14.	2.24
+	4 COMBINED AT	CN11B	467.	5.43	212.	148.	128.	6.49
+	ROUTED TO	RCP91	466.	5.43	212.	148.	128.	6.49
+	HYDROGRAPH AT	SB-G4a	142.	4.07	13.	3.	2.	0.06
+	HYDROGRAPH AT	DR91	160.	5.57	38.	10.	7.	4.14
+	ROUTED TO	R2DET	160.	5.60	38.	10.	7.	4.14
	3 COMBINED AT	CPDET	507.	5.63	235.	154.	133.	10.63
+	ROUTED TO	S-DET	328.	6.40	227.	153.	136.	10.63
+	ROUTED TO	RDET	327.	6.43	227.	153.	136.	10.63
+	ROUTED TO	RN11BS	326.	6.70	227.	153.	135.	10.63
+	HYDROGRAPH AT	N11	1231.	4.30	223.	56.	40.	0.90
+	HYDROGRAPH AT	DRV87	162.	5.50	41.	15.	12.	4.14
+	ROUTED TO	RDV87S	161.	5.53	41.	15.	12.	4.14
+	ROUTED TO	R-G1	159.	5.57	41.	15.	12.	4.14
+	DIVERSION TO	DX55I	142.	5.47	40.	15.	12.	4.14
+	HYDROGRAPH AT	DX55	19.	5.60	1.	0.	0.	4.14
+	DIVERSION TO	DX56I	15.	5.60	1.	0.	0.	4.14
	HYDROGRAPH AT	DX56	4.	5.60	0.	0.	0.	4.14
+	ROUTED TO	DX56W	1.	5.77	0.	0.	0.	4.14

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	HYDROGRAPH AT	DRV89	135.	5.53	24.	6.	4.	4.14
+	ROUTED TO	RDV89S	113.	5.70	24.	6.	4.	4.14
+	ROUTED TO	RDV89E	96.	5.97	24.	6.	4.	4.14
+	4 COMBINED AT	CN11	1231.	4.37	537.	237.	198.	11.53
+	ROUTED TO	RN11	909.	4.57	401.	200.	171.	11.53
+	HYDROGRAPH AT	N10	614.	4.30	115.	29.	21.	0.49
+	HYDROGRAPH AT	S10R	37.	4.23	8.	2.	1.	0.03
+	DIVERSION TO	S10RI	24.	4.23	4.	1.	1.	0.03
+	HYDROGRAPH AT	DS10RO	13.	4.23	3.	1.	1.	0.03
+	ROUTED TO	RS10RS	9.	4.70	3.	1.	1.	0.03
+	3 COMBINED AT	CN10	1268.	4.53	484.	221.	188.	12.05
	DIVERSION TO	N10I	518.	4.53	58.	15.	11.	12.05
+	HYDROGRAPH AT	DN10	750.	4.27	426.	206.	177.	12.05
+	ROUTED TO	RN10E	750.	4.53	425.	206.	176.	12.05
+	HYDROGRAPH AT	DR56	15.	5.60	1.	0.	0.	4.14
+	ROUTED TO	RDR56	3.	5.77	1.	0.	0.	4.14
+	HYDROGRAPH AT	N09	1068.	4.23	170.	43.	31.	0.65
+	3 COMBINED AT	CN09*	1368.	4.30	549.	240.	202.	12.70
+	HYDROGRAPH AT	CN21	2955.	5.93	1306.	414.	321.	15.37
+	ROUTED TO	RN21	2903.	6.17	1301.	414.	319.	15.37
+	HYDROGRAPH AT	DRTONR	100.	4.70	76.	59.	50.	4.14
+	HYDROGRAPH AT	N20	472.	4.27	83.	21.	15.	0.36
	3 COMBINED AT	CN20	3017.	6.17	1412.	484.	380.	15.73
	ROUTED TO							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		RN20	2988.	6.37	1411.	484.	376.	15.73
+	HYDROGRAPH AT	N12	475.	4.50	123.	31.	23.	0.51
+	DIVERSION TO	LN12D	16.	2.97	4.	1.	1.	0.51
+	HYDROGRAPH AT	LN12	475.	4.50	121.	30.	22.	0.51
+	HYDROGRAPH AT	N13	184.	5.10	112.	34.	25.	0.50
+	3 COMBINED AT	CN12	3239.	5.57	1562.	529.	412.	16.73
+	ROUTED TO	RN12	3221.	5.80	1561.	529.	410.	16.73
+	2 COMBINED AT	CN09+	3331.	5.80	1899.	721.	580.	26.16
+	ROUTED TO	RN09*	3319.	5.90	1898.	721.	578.	26.16
+	HYDROGRAPH AT	N19E	726.	4.60	123.	31.	22.	0.70
+	HYDROGRAPH AT	N19F	323.	4.63	58.	14.	10.	0.37
	2 COMBINED AT	CN19E	937.	4.63	169.	43.	31.	1.08
+	ROUTED TO	RN19E	853.	4.80	169.	43.	31.	1.08
+	HYDROGRAPH AT	N19D	575.	4.33	75.	19.	14.	0.39
+	2 COMBINED AT	CN19D	1029.	4.70	230.	58.	42.	1.47
+	ROUTED TO	RN19D	1013.	4.97	230.	58.	42.	1.47
+	HYDROGRAPH AT	N19C	1498.	4.10	141.	35.	26.	0.76
+	2 COMBINED AT	CN19C	1082.	4.13	344.	88.	63.	2.23
+	ROUTED TO	RN19C	1070.	4.30	344.	88.	63.	2.23
+	HYDROGRAPH AT	N19B	808.	4.07	61.	15.	11.	0.32
+	2 COMBINED AT	CN19B	1321.	4.23	390.	100.	72.	2.54
+	ROUTED TO	RN19B	1244.	4.60	390.	100.	72.	2.54
	HYDROGRAPH AT	N19A	903.	4.13	104.	26.	19.	0.47
+	HYDROGRAPH AT	A21B	42.	4.13	5.	1.	1.	0.02

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
ROUTED TO	RA21B	41.	4.23	5.	1.	1.	0.02
+ 3 COMBINED AT	CN19A	1520.	4.53	474.	122.	88.	3.04
+ ROUTED TO	397RR	1259.	4.80	470.	122.	88.	3.04
+ HYDROGRAPH AT	398A	314.	4.07	27.	7.	5.	0.10
+ HYDROGRAPH AT	398B	197.	4.20	38.	9.	7.	0.14
+ 3 COMBINED AT	C398B	1362.	4.77	520.	136.	98.	3.28
+ ROUTED TO	398BRR	1177.	5.10	514.	136.	98.	3.28
+ DIVERSION TO	398BI	392.	5.10	171.	45.	33.	3.28
+ HYDROGRAPH AT	D398B	784.	5.10	343.	91.	65.	3.28
+ DIVERSION TO	398BSI	392.	5.10	171.	45.	33.	3.28
+ HYDROGRAPH AT	D398BE	392.	5.10	171.	46.	33.	3.28
HYDROGRAPH AT	398D	274.	4.03	22.	6.	4.	0.08
+ HYDROGRAPH AT	398E	336.	4.10	28.	7.	5.	0.11
+ HYDROGRAPH AT	398F	214.	4.33	59.	15.	11.	0.20
+ 4 COMBINED AT	C398F	527.	4.90	262.	71.	51.	3.68
+ ROUTED TO	398FRR	307.	6.33	209.	70.	51.	3.68
+ HYDROGRAPH AT	D398BW	392.	5.10	171.	45.	33.	3.28
+ HYDROGRAPH AT	398C	84.	4.47	26.	7.	5.	0.09
+ 2 COMBINED AT	C398C	449.	5.03	195.	52.	37.	3.27
+ ROUTED TO	398CRR	312.	6.23	177.	52.	37.	3.27
+ HYDROGRAPH AT	398BSW	392.	5.10	171.	45.	33.	3.28
+ HYDROGRAPH AT	398G	133.	4.73	52.	14.	10.	0.22
4 COMBINED AT	C398G	977.	5.87	586.	177.	128.	4.09
ROUTED TO							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		398GRR	824.	6.73	544.	176.	128.	4.09
+	ROUTED TO	RM399	820.	6.87	541.	176.	128.	4.09
+	HYDROGRAPH AT	N18	788.	4.20	103.	26.	19.	0.50
+	2 COMBINED AT	CN18	820.	6.87	567.	197.	143.	4.59
+	ROUTED TO	RN18	808.	7.07	559.	195.	142.	4.59
+	HYDROGRAPH AT	N17	546.	4.23	85.	21.	15.	0.41
+	2 COMBINED AT	CN17	822.	4.43	602.	211.	153.	5.01
+	ROUTED TO	RN17	804.	4.67	601.	211.	153.	5.01
+	HYDROGRAPH AT	N16	1155.	4.30	201.	50.	36.	0.92
+	2 COMBINED AT	CN16	1483.	4.60	718.	251.	182.	5.93
+	ROUTED TO	RN16	1464.	4.73	717.	251.	182.	5.93
	HYDROGRAPH AT	N15B	792.	4.37	161.	41.	29.	0.75
+	ROUTED TO	RN15B	753.	4.90	160.	41.	29.	0.75
+	HYDROGRAPH AT	N15A	948.	4.37	193.	49.	35.	0.80
+	DIVERSION TO	LN15AD	948.	4.37	109.	27.	20.	0.80
+	HYDROGRAPH AT	LN15A	697.	4.77	85.	21.	15.	0.80
+	2 COMBINED AT	CN15A	1287.	4.77	234.	59.	42.	1.54
+	ROUTED TO	RN15A	1247.	5.00	234.	59.	42.	1.54
+	HYDROGRAPH AT	N15	546.	4.40	121.	31.	22.	0.54
+	3 COMBINED AT	CN15	2138.	4.97	972.	319.	231.	8.01
+	ROUTED TO	RN15	2124.	5.07	970.	319.	231.	8.01
+	HYDROGRAPH AT	N14A	458.	4.40	102.	26.	19.	0.44
	ROUTED TO	RN14A	454.	4.50	102.	26.	19.	0.44
+	HYDROGRAPH AT	N14	195.	4.07	24.	6.	4.	0.08

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	3 COMBINED AT	CN14	2347.	5.03	1047.	344.	250.	8.53
+	ROUTED TO	RN14	2299.	5.30	1034.	344.	249.	8.53
+	HYDROGRAPH AT	N08B	750.	4.40	165.	42.	30.	0.70
+	DIVERSION TO	LN08BD	750.	4.40	91.	23.	16.	0.70
+	HYDROGRAPH AT	LN08B	550.	4.83	76.	19.	14.	0.70
+	ROUTED TO	RN08B	389.	5.33	76.	19.	14.	0.70
+	HYDROGRAPH AT	N08A	702.	4.43	174.	44.	32.	0.74
+	DIVERSION TO	LN08AD	702.	4.43	93.	23.	17.	0.74
+	HYDROGRAPH AT	LN08A	545.	4.87	84.	21.	15.	0.74
+	2 COMBINED AT	CN08A	604.	5.50	149.	37.	27.	1.43
+	ROUTED TO	RN08A	525.	5.70	148.	37.	27.	1.43
	HYDROGRAPH AT	N08	918.	4.30	183.	46.	33.	0.79
+	3 COMBINED AT	CN08	2592.	5.33	1210.	401.	291.	10.75
+	ROUTED TO	RN08	2588.	5.37	1209.	401.	291.	10.75
+	2 COMBINED AT	CN09	4662.	5.80	2732.	1015.	795.	36.91
+	ROUTED TO	RN09	4641.	5.93	2729.	1015.	791.	36.91
+	HYDROGRAPH AT	DRN10	518.	4.53	58.	15.	11.	12.05
+	ROUTED TO	RN10S	512.	4.60	58.	15.	11.	12.05
+	DIVERSION TO	DX26I	477.	4.60	51.	13.	9.	12.05
+	HYDROGRAPH AT	DX26O	35.	4.33	7.	2.	1.	12.05
+	ROUTED TO	RX26S	35.	5.43	7.	2.	1.	12.05
+	HYDROGRAPH AT	DRX26	477.	4.60	51.	13.	9.	12.05
	HYDROGRAPH AT	N07A	809.	4.13	81.	20.	15.	0.36
	DIVERSION TO							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		LN07AD	809.	4.13	46.	11.	8.	0.36
+	HYDROGRAPH AT	LN07A	723.	4.20	35.	9.	6.	0.36
+	2 COMBINED AT	CN07A	1461.	4.43	185.	46.	33.	0.36
+	HYDROGRAPH AT	N07	962.	4.27	160.	40.	29.	0.75
+	4 COMBINED AT	CN07	4669.	5.93	2818.	1044.	815.	38.15
+	ROUTED TO	RN07	4665.	6.17	2813.	1044.	806.	38.15
+	HYDROGRAPH AT	A11L	662.	4.20	62.	15.	11.	0.25
+	ROUTED TO	RA11L	607.	4.37	62.	15.	11.	0.25
+	HYDROGRAPH AT	A11M	722.	4.10	55.	14.	10.	0.26
+	ROUTED TO	RA11M	670.	4.20	55.	14.	10.	0.26
+	HYDROGRAPH AT	A11J	181.	4.17	16.	4.	3.	0.08
	HYDROGRAPH AT	A11N	210.	4.10	14.	4.	3.	0.08
+	ROUTED TO	RA11N	200.	4.13	14.	4.	3.	0.08
+	HYDROGRAPH AT	A11O	146.	4.07	10.	2.	2.	0.06
+	ROUTED TO	RA11O	136.	4.17	10.	2.	2.	0.06
+	2 COMBINED AT	CX21	334.	4.17	24.	6.	4.	0.14
+	ROUTED TO	RX21	290.	4.33	24.	6.	4.	0.14
+	HYDROGRAPH AT	A11K	777.	4.10	46.	12.	8.	0.30
+	HYDROGRAPH AT	A11G	189.	4.03	13.	3.	2.	0.07
+	DIVERSION TO	A11GI	0.	4.03	0.	0.	0.	0.07
+	HYDROGRAPH AT	DA11G	189.	4.03	13.	3.	2.	0.07
+	ROUTED TO	RA11GN	178.	4.10	13.	3.	2.	0.07
	5 COMBINED AT	CA11K	1567.	4.13	148.	37.	27.	0.84
+	ROUTED TO	RA11K	1477.	4.23	148.	37.	27.	0.84

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	HYDROGRAPH AT	DRA11G	0.	4.03	0.	0.	0.	0.07
+	ROUTED TO	RA11GW	0.	4.20	0.	0.	0.	0.07
+	HYDROGRAPH AT	A11I	884.	4.07	58.	14.	10.	0.28
+	4 COMBINED AT	CA11I	2019.	4.23	257.	64.	46.	1.37
+	ROUTED TO	RA11I	1957.	4.40	257.	64.	46.	1.37
+	HYDROGRAPH AT	A11E	542.	4.20	44.	11.	8.	0.30
+	HYDROGRAPH AT	A11F	898.	4.20	79.	20.	14.	0.47
+	DIVERSION TO	A11FI	1.	4.20	0.	0.	0.	0.47
+	HYDROGRAPH AT	DA11F	897.	4.20	79.	20.	14.	0.47
+	ROUTED TO	RA11FN	866.	4.23	78.	20.	14.	0.47
+	3 COMBINED AT	CA11E	2428.	4.37	351.	88.	64.	2.13
	ROUTED TO	RA11E	2399.	4.47	351.	88.	64.	2.13
+	HYDROGRAPH AT	A11H	188.	4.07	10.	2.	2.	0.07
+	ROUTED TO	RA11H	149.	4.37	10.	2.	2.	0.07
+	HYDROGRAPH AT	DRA09U	91.	4.10	6.	2.	1.	0.17
+	ROUTED TO	RA09UW	67.	4.33	6.	2.	1.	0.17
+	HYDROGRAPH AT	A09T	348.	4.17	26.	7.	5.	0.18
+	2 COMBINED AT	CA09T	407.	4.17	32.	8.	6.	0.18
+	DIVERSION TO	A09TI	197.	4.17	8.	2.	1.	0.18
+	HYDROGRAPH AT	DA09T	210.	4.03	24.	6.	4.	0.18
+	ROUTED TO	RA09TW	210.	4.37	24.	6.	4.	0.18
+	HYDROGRAPH AT	DRA11F	1.	4.20	0.	0.	0.	0.47
	ROUTED TO	RA11FS	0.	4.63	0.	0.	0.	0.47
	2 COMBINED AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		CX22	210.	4.37	25.	6.	4.	0.18
+	ROUTED TO	RX22	210.	4.43	25.	6.	4.	0.18
+	3 COMBINED AT	CX23	2596.	4.47	380.	95.	69.	2.38
+	ROUTED TO	RX23	2519.	4.70	380.	95.	69.	2.38
+	HYDROGRAPH AT	A99Z	333.	4.17	32.	8.	6.	0.16
+	ROUTED TO	RA99Z	302.	4.43	32.	8.	6.	0.16
+	HYDROGRAPH AT	A11D	313.	4.13	20.	5.	4.	0.15
+	2 COMBINED AT	CA11D	397.	4.17	51.	13.	9.	0.30
+	ROUTED TO	RA11D	357.	4.97	51.	13.	9.	0.30
+	HYDROGRAPH AT	A11B	196.	4.23	21.	5.	4.	0.15
+	HYDROGRAPH AT	A11A	659.	4.43	93.	23.	17.	0.59
	4 COMBINED AT	CA11A	2780.	4.70	495.	124.	90.	3.43
+	ROUTED TO	RA11A	2762.	4.73	495.	124.	90.	3.43
+	HYDROGRAPH AT	A11C	152.	4.33	16.	4.	3.	0.12
+	ROUTED TO	RA11C	140.	4.60	16.	4.	3.	0.12
+	2 COMBINED AT	CA11*	2817.	4.73	504.	126.	91.	3.55
+	ROUTED TO	RA11*	2768.	4.90	503.	126.	91.	3.55
+	HYDROGRAPH AT	A11	254.	4.30	22.	6.	4.	0.16
+	2 COMBINED AT	CA11	2776.	4.90	516.	130.	93.	3.71
+	HYDROGRAPH AT	DRN11O	12.	4.13	1.	0.	0.	0.05
+	ROUTED TO	RN11OW	3.	4.40	1.	0.	0.	0.05
+	HYDROGRAPH AT	DRA09T	197.	4.17	8.	2.	1.	0.18
	ROUTED TO	RA09TS	69.	5.23	8.	2.	1.	0.18
+	HYDROGRAPH AT	A09R	173.	4.33	20.	5.	4.	0.14

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	3 COMBINED AT	CA09R	176.	4.33	28.	7.	5.	0.32
+	DIVERSION TO	A09RI	0.	4.33	0.	0.	0.	0.32
+	HYDROGRAPH AT	DA09R	176.	4.33	28.	7.	5.	0.32
+	ROUTED TO	RA09RS	161.	4.67	28.	7.	5.	0.32
+	HYDROGRAPH AT	DRN11M	102.	4.27	12.	3.	2.	0.32
+	ROUTED TO	RN11MW	93.	4.80	12.	3.	2.	0.32
+	HYDROGRAPH AT	DRN11J	30.	4.10	8.	2.	1.	0.56
+	ROUTED TO	RN11JW	30.	4.63	8.	2.	1.	0.56
+	2 COMBINED AT	CX4	123.	4.80	20.	5.	4.	0.39
+	ROUTED TO	RX4	115.	5.23	20.	5.	4.	0.39
+	HYDROGRAPH AT	A09O	200.	4.43	29.	7.	5.	0.19
	3 COMBINED AT	CA09O	290.	4.67	69.	17.	13.	0.90
+	DIVERSION TO	A09OI	0.	4.67	0.	0.	0.	0.90
+	HYDROGRAPH AT	DA09O	289.	4.67	69.	17.	12.	0.90
+	ROUTED TO	RA09OS	249.	5.13	69.	17.	12.	0.90
+	HYDROGRAPH AT	DRN11G	0.	4.43	0.	0.	0.	1.08
+	ROUTED TO	RN11GW	0.	5.50	0.	0.	0.	1.08
+	HYDROGRAPH AT	A09K	524.	4.40	59.	15.	11.	0.41
+	2 COMBINED AT	CA09K	524.	4.40	59.	15.	11.	0.41
+	DIVERSION TO	A09KI	419.	4.40	47.	12.	8.	0.41
+	HYDROGRAPH AT	DA09K	105.	4.40	12.	3.	2.	0.41
+	ROUTED TO	RA09KW	93.	4.80	12.	3.	2.	0.41
	2 COMBINED AT	CX7	274.	5.10	75.	19.	13.	1.31
	DIVERSION TO							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		X7I	0.	5.10	0.	0.	0.	1.31
+	HYDROGRAPH AT	DX7	274.	5.10	75.	19.	13.	1.31
+	ROUTED TO	RX7S	264.	5.23	75.	19.	13.	1.31
+	DIVERSION TO	AX25I	85.	5.20	23.	6.	4.	1.31
+	HYDROGRAPH AT	DX25	179.	5.23	52.	13.	9.	1.31
+	ROUTED TO	RX25E	175.	5.40	52.	13.	9.	1.31
+	HYDROGRAPH AT	DRX25	85.	5.20	23.	6.	4.	1.31
+	ROUTED TO	RX25W	84.	5.50	23.	6.	4.	1.31
+	HYDROGRAPH AT	DRA09K	419.	4.40	47.	12.	8.	0.41
+	ROUTED TO	RA09KS	388.	4.60	47.	12.	8.	0.41
+	HYDROGRAPH AT	A09G	406.	4.23	31.	8.	6.	0.22
	DIVERSION TO	A09GI	243.	4.23	18.	5.	3.	0.22
+	HYDROGRAPH AT	DA09G	162.	4.23	12.	3.	2.	0.22
+	2 COMBINED AT	CA09G	405.	4.60	57.	14.	10.	0.63
+	ROUTED TO	RA09GW	364.	4.83	57.	14.	10.	0.63
+	HYDROGRAPH AT	A09J	243.	4.30	24.	6.	4.	0.17
+	HYDROGRAPH AT	DRX7	0.	5.10	0.	0.	0.	1.31
+	ROUTED TO	RX7W	0.	5.93	0.	0.	0.	1.31
+	2 COMBINED AT	CA09J	243.	4.30	24.	6.	4.	0.17
+	DIVERSION TO	A09JI	1.	4.30	0.	0.	0.	0.17
+	HYDROGRAPH AT	DA09J	242.	4.30	24.	6.	4.	0.17
+	ROUTED TO	RA09JS	216.	4.60	24.	6.	4.	0.17
	HYDROGRAPH AT	A09H	403.	4.30	36.	9.	7.	0.25
+	5 COMBINED AT	CA09H	498.	5.10	159.	40.	29.	2.35

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	ROUTED TO	RA09H	488.	5.43	158.	40.	29.	2.35
+	HYDROGRAPH AT	DRA09G	243.	4.23	18.	5.	3.	0.22
+	ROUTED TO	RA09GS	205.	4.63	18.	5.	3.	0.22
+	HYDROGRAPH AT	A09F	577.	4.20	76.	19.	14.	0.37
+	DIVERSION TO	LA09FD	577.	4.20	30.	8.	5.	0.37
+	HYDROGRAPH AT	LA09F	561.	4.27	46.	12.	8.	0.37
+	3 COMBINED AT	CA09F	573.	5.17	205.	52.	37.	2.72
+	DIVERSION TO	A09FI	142.	5.17	31.	8.	6.	2.72
+	HYDROGRAPH AT	DA09F	431.	5.17	173.	44.	31.	2.72
+	ROUTED TO	RA09FW	430.	5.30	173.	44.	31.	2.72
+	HYDROGRAPH AT	A09I	335.	4.13	37.	9.	7.	0.17
	DIVERSION TO	LA09ID	335.	4.13	20.	5.	4.	0.17
+	HYDROGRAPH AT	LA09I	284.	4.27	17.	4.	3.	0.17
+	DIVERSION TO	A09II	283.	4.27	17.	4.	3.	0.17
+	HYDROGRAPH AT	DA09I	1.	4.27	0.	0.	0.	0.17
+	ROUTED TO	RA09IS	0.	4.90	0.	0.	0.	0.17
+	HYDROGRAPH AT	A09E	159.	4.30	32.	8.	6.	0.15
+	DIVERSION TO	LA09ED	159.	4.30	18.	4.	3.	0.15
+	HYDROGRAPH AT	LA09E	122.	4.67	15.	4.	3.	0.15
+	3 COMBINED AT	CA09E	484.	5.10	183.	46.	33.	2.87
+	ROUTED TO	RA09E	483.	5.20	183.	46.	33.	2.87
+	HYDROGRAPH AT	A09S	142.	4.17	11.	3.	2.	0.07
	HYDROGRAPH AT	DRA09R	0.	4.33	0.	0.	0.	0.32
	ROUTED TO							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		RA09RW	0.	5.60	0.	0.	0.	0.32
+	2 COMBINED AT	CA09S	142.	4.17	11.	3.	2.	0.07
+	DIVERSION TO	A09SI	1.	4.17	0.	0.	0.	0.07
+	HYDROGRAPH AT	DA09S	142.	4.17	11.	3.	2.	0.07
+	ROUTED TO	RA09SS	119.	4.53	11.	3.	2.	0.07
+	HYDROGRAPH AT	A09Q	327.	4.30	32.	8.	6.	0.22
+	HYDROGRAPH AT	A09P	189.	4.40	27.	7.	5.	0.18
+	HYDROGRAPH AT	DRA09O	0.	4.67	0.	0.	0.	0.90
+	ROUTED TO	RA09OW	0.	5.43	0.	0.	0.	0.90
+	2 COMBINED AT	CA09P	189.	4.40	27.	7.	5.	0.18
+	ROUTED TO	RA09P	186.	4.47	27.	7.	5.	0.18
	3 COMBINED AT	CA09Q	527.	4.43	70.	17.	13.	0.47
+	DIVERSION TO	A09QI	1.	4.40	0.	0.	0.	0.47
+	HYDROGRAPH AT	DA09Q	526.	4.43	70.	17.	13.	0.47
+	ROUTED TO	RA09QS	509.	4.53	69.	17.	13.	0.47
+	HYDROGRAPH AT	A09M	540.	4.10	42.	10.	8.	0.25
+	DIVERSION TO	LA09MD	503.	4.03	17.	4.	3.	0.25
+	HYDROGRAPH AT	LA09M	540.	4.10	25.	6.	5.	0.25
+	2 COMBINED AT	CA09M	556.	4.47	90.	22.	16.	0.71
+	ROUTED TO	RA09M	553.	4.53	90.	22.	16.	0.71
+	HYDROGRAPH AT	A09N	146.	4.47	22.	5.	4.	0.11
+	DIVERSION TO	LA09ND	146.	4.47	11.	3.	2.	0.11
	HYDROGRAPH AT	LA09N	122.	4.63	11.	3.	2.	0.11
+	2 COMBINED AT	CA09N	601.	4.63	98.	24.	18.	0.82

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	ROUTED TO	RA09N	561.	4.80	98.	24.	18.	0.82
+	HYDROGRAPH AT	DRA09J	1.	4.30	0.	0.	0.	0.17
+	ROUTED TO	RA09JW	1.	4.53	0.	0.	0.	0.17
+	HYDROGRAPH AT	A09L	188.	4.20	28.	7.	5.	0.14
+	DIVERSION TO	LA09LD	188.	4.20	18.	4.	3.	0.14
+	HYDROGRAPH AT	LA09L	126.	4.53	10.	3.	2.	0.14
+	3 COMBINED AT	CA09L	593.	4.77	101.	25.	18.	1.13
+	DIVERSION TO	A09LI	1.	4.77	0.	0.	0.	1.13
+	HYDROGRAPH AT	DA09L	592.	4.77	101.	25.	18.	1.13
+	ROUTED TO	RA09LS	566.	5.13	101.	25.	18.	1.13
+	HYDROGRAPH AT	DRA09I	283.	4.27	17.	4.	3.	0.17
	ROUTED TO	RA09IW	227.	4.40	17.	4.	3.	0.17
+	2 COMBINED AT	CX10	568.	5.10	113.	28.	20.	1.34
+	DIVERSION TO	X10I	550.	5.13	59.	15.	11.	1.34
+	HYDROGRAPH AT	DX10	259.	5.67	54.	13.	10.	1.34
+	HYDROGRAPH AT	A09D	745.	4.07	62.	15.	11.	0.25
+	DIVERSION TO	LA09DD	728.	4.03	33.	8.	6.	0.25
+	HYDROGRAPH AT	LA09D	717.	4.10	29.	7.	5.	0.25
+	2 COMBINED AT	CA09D	467.	4.13	81.	20.	15.	1.59
+	HYDROGRAPH AT	DRX10	550.	5.13	59.	15.	11.	1.34
+	ROUTED TO	RX10W	542.	5.20	59.	15.	11.	1.34
+	DIVERSION TO	X11I	58.	5.23	4.	1.	1.	1.34
	HYDROGRAPH AT	DX11	484.	5.20	54.	14.	10.	1.34
	ROUTED TO							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		RX11S	466.	5.30	54.	14.	10.	1.34
+	3 COMBINED AT	CA09C*	884.	5.43	280.	71.	51.	4.46
+	ROUTED TO	RA09C*	884.	5.43	280.	71.	51.	4.46
+	HYDROGRAPH AT	A09C	120.	4.20	11.	3.	2.	0.07
+	2 COMBINED AT	CA09C	883.	5.43	286.	72.	52.	4.53
+	ROUTED TO	RA09C	882.	5.50	285.	72.	52.	4.53
+	HYDROGRAPH AT	A09B	130.	4.00	10.	3.	2.	0.04
+	ROUTED TO	RA09B	106.	4.43	10.	3.	2.	0.04
+	HYDROGRAPH AT	A09A	80.	4.30	15.	4.	3.	0.08
+	3 COMBINED AT	CA09A	898.	5.47	302.	77.	56.	4.66
+	DIVERSION TO	A09AI	758.	5.47	197.	49.	35.	4.66
	HYDROGRAPH AT	DA09AO	140.	4.97	106.	28.	20.	4.66
+	ROUTED TO	RA09AW	140.	6.07	103.	28.	20.	4.66
+	HYDROGRAPH AT	A99T	73.	4.03	3.	1.	1.	0.03
+	DIVERSION TO	LA99TD	68.	3.97	2.	0.	0.	0.03
+	HYDROGRAPH AT	LA99T	73.	4.03	2.	0.	0.	0.03
+	ROUTED TO	RA99T	42.	4.27	2.	0.	0.	0.03
+	HYDROGRAPH AT	A09	339.	4.23	23.	6.	4.	0.18
+	3 COMBINED AT	CA09	141.	4.23	109.	32.	23.	4.86
+	HYDROGRAPH AT	DRA09F	142.	5.17	31.	8.	6.	2.72
+	ROUTED TO	RA09FS	141.	5.20	31.	8.	6.	2.72
+	HYDROGRAPH AT	S30D	271.	4.17	33.	8.	6.	0.13
	2 COMBINED AT	CS30D	200.	4.40	61.	15.	11.	2.85
+	ROUTED TO	RS30D	157.	4.60	60.	15.	11.	2.85

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	HYDROGRAPH AT	S30B	373.	4.40	88.	22.	16.	0.40
+	HYDROGRAPH AT	S30C	591.	4.30	119.	30.	22.	0.46
+	3 COMBINED AT	CS30B	868.	4.50	244.	63.	45.	3.70
+	DIVERSION TO	DS30BI	318.	4.50	35.	9.	6.	3.70
+	HYDROGRAPH AT	DS30BO	550.	4.50	209.	54.	39.	3.70
+	ROUTED TO	RS30BW	550.	4.97	209.	54.	39.	3.70
+	HYDROGRAPH AT	S30A	637.	4.33	121.	30.	22.	0.53
+	2 COMBINED AT	CS30A	988.	4.53	313.	80.	58.	4.23
+	DIVERSION TO	DS30AI	438.	4.53	65.	16.	12.	4.23
+	HYDROGRAPH AT	DS30AO	550.	4.33	248.	64.	46.	4.23
+	ROUTED TO	RS30AW	550.	4.60	248.	64.	46.	4.23
	HYDROGRAPH AT	S30	418.	4.23	65.	16.	12.	0.32
+	2 COMBINED AT	CS30	806.	4.37	299.	77.	56.	4.56
+	ROUTED TO	RS30	806.	4.37	299.	77.	56.	4.56
+	HYDROGRAPH AT	A07G	685.	4.07	63.	16.	11.	0.26
+	DIVERSION TO	LA07GD	655.	4.03	30.	8.	5.	0.26
+	HYDROGRAPH AT	LA07G	684.	4.10	33.	8.	6.	0.26
+	ROUTED TO	RA07G	681.	4.27	33.	8.	6.	0.26
+	HYDROGRAPH AT	A07F	232.	4.33	50.	13.	9.	0.23
+	ROUTED TO	RA07F	230.	4.43	50.	13.	9.	0.23
+	HYDROGRAPH AT	A07E	524.	4.13	62.	15.	11.	0.23
+	3 COMBINED AT	CA07E	1136.	4.27	141.	36.	26.	0.72
	ROUTED TO	RA07E	933.	4.40	141.	36.	26.	0.72
	HYDROGRAPH AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		A07C	298.	4.27	28.	7.	5.	0.17
+	2 COMBINED AT	CA07C	1109.	4.40	165.	42.	30.	0.89
+	ROUTED TO	RA07C	1104.	4.40	165.	42.	30.	0.89
+	HYDROGRAPH AT	A07H	268.	4.03	19.	5.	3.	0.09
+	ROUTED TO	RA07H	254.	4.17	19.	5.	3.	0.09
+	HYDROGRAPH AT	DA09A	758.	5.47	197.	49.	35.	4.66
+	ROUTED TO	RA09AS	749.	5.63	197.	49.	35.	4.66
+	HYDROGRAPH AT	A08B	149.	4.17	17.	4.	3.	0.10
+	2 COMBINED AT	CA08B	748.	5.63	207.	52.	38.	4.75
+	ROUTED TO	RA08B	742.	5.83	207.	52.	37.	4.75
+	HYDROGRAPH AT	A07D	129.	4.60	40.	10.	7.	0.23
	4 COMBINED AT	CA07D	1096.	4.43	425.	108.	78.	5.97
+	ROUTED TO	RA07D	904.	4.70	376.	96.	69.	5.97
+	HYDROGRAPH AT	A07B	936.	4.20	123.	31.	22.	0.65
+	DIVERSION TO	LA07BD	877.	4.13	39.	10.	7.	0.65
+	HYDROGRAPH AT	LA07B	923.	4.23	85.	21.	15.	0.65
+	3 COMBINED AT	CA07B	1826.	4.47	667.	172.	124.	11.17
+	ROUTED TO	RA07B	1825.	4.53	667.	172.	124.	11.17
+	HYDROGRAPH AT	A06A	541.	4.13	54.	14.	10.	0.28
+	2 COMBINED AT	CA06A	1976.	4.47	702.	181.	131.	11.45
+	HYDROGRAPH AT	A07A	103.	4.30	21.	5.	4.	0.12
+	ROUTED TO	RA07A	103.	4.37	21.	5.	4.	0.12
	HYDROGRAPH AT	A07	319.	4.03	15.	4.	3.	0.12
+	2 COMBINED AT	CA07	349.	4.03	36.	9.	7.	0.24

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
ROUTED TO	RA07	260.	4.20	36.	9.	7.	0.24
+ HYDROGRAPH AT	A06	605.	4.17	34.	9.	6.	0.28
+ 3 COMBINED AT	CA06	2111.	4.43	731.	189.	136.	11.97
+ ROUTED TO	RA06	2088.	4.57	731.	189.	136.	11.97
+ HYDROGRAPH AT	A99Q	345.	4.00	15.	4.	3.	0.12
+ 2 COMBINED AT	CA99Q	2087.	4.57	737.	190.	137.	12.09
+ 3 COMBINED AT	DUMMY1	3614.	4.90	1150.	300.	216.	20.66
+ DIVERSION TO	DUMMYO	3614.	4.90	1150.	300.	216.	20.66
+ HYDROGRAPH AT	DUMMY	0.	0.03	0.	0.	0.	20.66
+ ROUTED TO	EMPTY	0.	0.03	0.	0.	0.	20.66
+ HYDROGRAPH AT	S10V	303.	4.20	46.	12.	8.	0.20
ROUTED TO	RS10V	289.	4.40	46.	12.	8.	0.20
+ HYDROGRAPH AT	S10U	136.	4.20	21.	5.	4.	0.11
+ 2 COMBINED AT	CS10U	406.	4.37	67.	17.	12.	0.30
+ ROUTED TO	RS10U	396.	4.50	67.	17.	12.	0.30
+ HYDROGRAPH AT	S10T	470.	4.27	79.	20.	14.	0.34
+ 2 COMBINED AT	CS10T	762.	4.43	143.	36.	26.	0.64
+ ROUTED TO	RS10T	754.	4.50	143.	36.	26.	0.64
+ HYDROGRAPH AT	DS30BX	318.	4.50	35.	9.	6.	3.70
+ ROUTED TO	RS30BS	300.	4.73	35.	9.	6.	3.70
+ HYDROGRAPH AT	S10S	973.	4.20	136.	34.	25.	0.49
+ 3 COMBINED AT	CS10S	1201.	4.60	280.	71.	51.	4.84
ROUTED TO	RS10S	1176.	4.67	280.	71.	51.	4.84
HYDROGRAPH AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		S10Q	369.	4.27	69.	17.	13.	0.25
+	2 COMBINED AT	CS10Q	1376.	4.67	342.	87.	62.	5.10
+	ROUTED TO	RS10Q	1364.	4.73	342.	87.	62.	5.10
+	HYDROGRAPH AT	DRS10R	24.	4.23	4.	1.	1.	0.03
+	ROUTED TO	RS10RW	22.	4.87	4.	1.	1.	0.03
+	HYDROGRAPH AT	S10O	1089.	4.27	179.	45.	32.	0.79
+	3 COMBINED AT	CS10O	1990.	4.50	497.	126.	91.	5.89
+	HYDROGRAPH AT	S10J	163.	4.10	18.	4.	3.	0.08
+	DIVERSION TO	S10JI	96.	4.10	10.	2.	2.	0.08
+	HYDROGRAPH AT	DS10JO	68.	4.10	8.	2.	1.	0.08
+	ROUTED TO	RS10JW	67.	4.13	8.	2.	1.	0.08
	2 COMBINED AT	CS10KN	2010.	4.50	503.	127.	92.	5.97
+	ROUTED TO	RS10KN	2003.	4.53	503.	127.	92.	5.97
+	HYDROGRAPH AT	S10JX	96.	4.10	10.	2.	2.	0.08
+	ROUTED TO	RS10JS	93.	4.17	10.	2.	2.	0.08
+	HYDROGRAPH AT	S10I	211.	4.17	30.	7.	5.	0.13
+	2 COMBINED AT	CS10I	304.	4.17	40.	10.	7.	0.13
+	DIVERSION TO	S10II	178.	4.17	23.	6.	4.	0.13
+	HYDROGRAPH AT	DS10IO	126.	4.17	17.	4.	3.	0.13
+	ROUTED TO	RS10IW	125.	4.20	17.	4.	3.	0.13
+	2 COMBINED AT	CS10KM	2055.	4.53	516.	131.	94.	6.11
+	ROUTED TO	RS10KM	2034.	4.60	515.	131.	94.	6.11
	HYDROGRAPH AT	S10IX	178.	4.17	23.	6.	4.	0.13
+	ROUTED TO	RS10IS	173.	4.30	23.	6.	4.	0.13

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	HYDROGRAPH AT	S10N	210.	4.20	32.	8.	6.	0.14
+	2 COMBINED AT	CS10N	373.	4.27	55.	14.	10.	0.35
+	DIVERSION TO	S10NI	187.	4.27	27.	7.	5.	0.35
+	HYDROGRAPH AT	DS10NO	187.	4.27	27.	7.	5.	0.35
+	ROUTED TO	RS10NW	187.	4.27	27.	7.	5.	0.35
+	HYDROGRAPH AT	S10K	499.	4.27	87.	22.	16.	0.34
+	3 COMBINED AT	CS10K	2397.	4.57	612.	155.	112.	6.58
+	ROUTED TO	RS10K	2376.	4.67	612.	155.	112.	6.58
+	HYDROGRAPH AT	S10NX	187.	4.27	27.	7.	5.	0.35
+	ROUTED TO	RS10NS	180.	4.47	27.	7.	5.	0.35
+	HYDROGRAPH AT	S10G	592.	4.17	68.	17.	12.	0.28
	3 COMBINED AT	CS10G	2646.	4.60	690.	175.	126.	6.86
+	ROUTED TO	RS10G	2629.	4.70	690.	175.	126.	6.86
+	DIVERSION TO	X40I	550.	4.33	212.	54.	39.	6.86
+	HYDROGRAPH AT	DX40	2079.	4.70	477.	121.	87.	6.86
+	ROUTED TO	RX40S	2064.	4.77	477.	121.	87.	6.86
+	HYDROGRAPH AT	S10D	550.	4.33	114.	29.	21.	0.46
+	2 COMBINED AT	CS10D	2360.	4.73	571.	145.	104.	7.32
+	HYDROGRAPH AT	DS30X	438.	4.53	65.	16.	12.	4.23
+	ROUTED TO	RS30AS	419.	4.87	65.	16.	12.	4.23
+	HYDROGRAPH AT	S10P	439.	4.27	78.	20.	14.	0.33
+	2 COMBINED AT	CS10P	600.	4.83	132.	33.	24.	4.56
	ROUTED TO	RS10P	566.	5.17	132.	33.	24.	4.56
	HYDROGRAPH AT							

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	S10E	369.	4.77	141.	37.	27.	0.63
+ 2 COMBINED AT	CS10E	840.	5.17	253.	66.	47.	5.19
+ ROUTED TO	RS10E	831.	5.27	253.	66.	47.	5.19
+ HYDROGRAPH AT	S10M	722.	4.17	95.	24.	17.	0.35
+ ROUTED TO	RS10M	673.	4.40	95.	24.	17.	0.35
+ 2 COMBINED AT	CS10E*	986.	5.20	335.	87.	63.	5.54
+ ROUTED TO	RS10E*	982.	5.27	335.	87.	63.	5.54
+ HYDROGRAPH AT	S10F	345.	4.37	76.	19.	14.	0.33
+ ROUTED TO	RS10F	337.	4.63	76.	19.	14.	0.33
+ 2 COMBINED AT	CS10F*	1149.	5.23	397.	103.	74.	5.88
+ ROUTED TO	RS10F*	1142.	5.33	397.	103.	74.	5.88
+ HYDROGRAPH AT	S10C	330.	4.57	106.	28.	20.	0.37
+ 3 COMBINED AT	CS10C	3328.	4.80	975.	254.	183.	13.57
+ ROUTED TO	RS10C	3317.	4.83	975.	254.	183.	13.57
+ HYDROGRAPH AT	DRX40	550.	4.33	212.	54.	39.	6.86
+ ROUTED TO	RX40E	550.	4.60	212.	54.	39.	6.86
+ HYDROGRAPH AT	S10B	197.	4.23	35.	9.	6.	0.14
+ 2 COMBINED AT	CS10B	743.	4.30	241.	61.	44.	0.14
+ ROUTED TO	RS10B	739.	4.37	241.	61.	44.	0.14
+ HYDROGRAPH AT	S10A	46.	4.30	11.	3.	2.	0.05
+ HYDROGRAPH AT	S10	149.	4.27	29.	7.	5.	0.11
+ 4 COMBINED AT	CS10	4032.	4.83	1247.	323.	233.	13.87
ROUTED TO	RS10	4030.	4.83	1247.	323.	233.	13.87
+ HYDROGRAPH AT	N06	952.	4.20	135.	34.	25.	0.59

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	4 COMBINED AT	CN06	5720.	5.07	3517.	1263.	976.	52.61
+	ROUTED TO	RN06	5663.	5.17	3509.	1263.	975.	52.61
+	HYDROGRAPH AT	N05C	357.	4.27	60.	15.	11.	0.28
+	2 COMBINED AT	CN05C	5718.	5.17	3532.	1270.	981.	52.89
+	ROUTED TO	RN05C	5671.	5.27	3522.	1270.	979.	52.89
+	HYDROGRAPH AT	N05B	221.	4.53	69.	18.	13.	0.31
+	DIVERSION TO	DN05BI	199.	4.53	62.	16.	12.	0.31
+	HYDROGRAPH AT	DN05B	22.	4.53	7.	2.	1.	0.31
+	ROUTED TO	RN05BE	22.	4.67	7.	2.	1.	0.31
+	HYDROGRAPH AT	N05A	330.	4.17	41.	10.	7.	0.17
+	HYDROGRAPH AT	N05	393.	4.27	73.	18.	13.	0.28
	4 COMBINED AT	CN05	5760.	5.27	3561.	1287.	992.	53.65
+	ROUTED TO	RN05	5754.	5.33	3559.	1287.	990.	53.65
+	HYDROGRAPH AT	DN05BX	199.	4.53	62.	16.	12.	0.31
+	ROUTED TO	RN05BS	198.	4.70	62.	16.	12.	0.31
+	HYDROGRAPH AT	N04A	101.	4.17	17.	4.	3.	0.07
+	3 COMBINED AT	CN04A	5853.	5.33	3599.	1299.	1000.	53.72
+	ROUTED TO	RN04A	5791.	5.50	3586.	1299.	997.	53.72
+	HYDROGRAPH AT	N04	1090.	4.30	198.	50.	36.	0.83
+	DIVERSION TO	LN04D	426.	3.97	31.	8.	6.	0.83
+	HYDROGRAPH AT	LN04	1090.	4.30	168.	42.	30.	0.83
+	2 COMBINED AT	CN04	5916.	5.43	3648.	1323.	1014.	54.54
	ROUTED TO	RN04	5914.	5.47	3647.	1323.	1014.	54.54
	HYDROGRAPH AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		S01G	469.	4.23	74.	18.	13.	0.28
+	ROUTED TO	RS01G	446.	4.53	74.	18.	13.	0.28
+	HYDROGRAPH AT	S01D	569.	4.43	138.	35.	25.	0.63
+	2 COMBINED AT	CS01D	941.	4.53	207.	52.	38.	0.91
+	ROUTED TO	RS01D	925.	4.70	207.	52.	38.	0.91
+	HYDROGRAPH AT	S01H	329.	4.33	69.	17.	13.	0.32
+	ROUTED TO	RS01H	323.	4.53	69.	17.	13.	0.32
+	HYDROGRAPH AT	S01E	342.	4.20	49.	12.	9.	0.23
+	2 COMBINED AT	CS01E	575.	4.40	117.	30.	21.	0.55
+	ROUTED TO	RS01E	566.	4.53	117.	30.	21.	0.55
+	HYDROGRAPH AT	S01C	526.	4.30	93.	23.	17.	0.40
	3 COMBINED AT	CS01C	1599.	4.67	390.	99.	72.	1.87
+	ROUTED TO	RS01C	1596.	4.70	390.	99.	72.	1.87
+	HYDROGRAPH AT	S01I	333.	4.23	54.	14.	10.	0.23
+	ROUTED TO	RS01I	323.	4.37	54.	14.	10.	0.23
+	HYDROGRAPH AT	S01F	184.	4.23	30.	7.	5.	0.15
+	2 COMBINED AT	CS01F	494.	4.33	83.	21.	15.	0.38
+	ROUTED TO	RS01F	483.	4.53	83.	21.	15.	0.38
+	HYDROGRAPH AT	S01B	468.	4.23	73.	18.	13.	0.31
+	3 COMBINED AT	CS01B	2085.	4.67	522.	133.	96.	2.56
+	ROUTED TO	RS01B	2077.	4.73	522.	133.	96.	2.56
+	HYDROGRAPH AT	S01A	342.	4.33	71.	18.	13.	0.35
	2 COMBINED AT	CS01A	2254.	4.73	578.	147.	106.	2.91
+	ROUTED TO	RS01A	2244.	4.77	578.	147.	106.	2.91

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	HYDROGRAPH AT	S01	221.	4.40	56.	14.	10.	0.26
+	2 COMBINED AT	CS01	2374.	4.77	623.	159.	115.	3.16
+	ROUTED TO	RS01	2373.	4.77	623.	159.	115.	3.16
+	2 COMBINED AT	CN03*	6795.	5.37	3977.	1419.	1087.	57.71
+	ROUTED TO	RN03*	6768.	5.53	3974.	1418.	1081.	57.71
+	HYDROGRAPH AT	N03A	351.	4.40	82.	21.	15.	0.39
+	ROUTED TO	RN03A	347.	4.50	82.	21.	15.	0.39
+	HYDROGRAPH AT	N03B	723.	4.40	146.	37.	26.	0.63
+	ROUTED TO	RN03B	720.	4.43	146.	37.	26.	0.63
+	HYDROGRAPH AT	N03	464.	4.50	119.	30.	22.	0.60
+	4 COMBINED AT	CN03	7084.	5.50	4115.	1464.	1116.	59.33
	ROUTED TO	RN03	7066.	5.57	4111.	1464.	1115.	59.33
+	HYDROGRAPH AT	N02B	183.	4.27	30.	8.	6.	0.15
+	DIVERSION TO	LN02BD	153.	4.17	7.	2.	1.	0.15
+	HYDROGRAPH AT	LN02B	183.	4.27	23.	6.	4.	0.15
+	2 COMBINED AT	CN02B	7076.	5.57	4117.	1466.	1116.	59.48
+	ROUTED TO	RN02B	7069.	5.63	4112.	1466.	1114.	59.48
+	HYDROGRAPH AT	N02	994.	4.47	150.	37.	27.	0.76
+	HYDROGRAPH AT	N02A	361.	4.20	35.	9.	6.	0.18
+	3 COMBINED AT	CN02	7120.	5.63	4150.	1486.	1130.	60.42
+	HYDROGRAPH AT	S20A	247.	4.23	44.	11.	8.	0.16
+	ROUTED TO	RS20A	245.	4.30	44.	11.	8.	0.16
	HYDROGRAPH AT	S20	231.	4.20	38.	10.	7.	0.14
	2 COMBINED AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		CS20	466.	4.27	82.	21.	15.	0.30
+	ROUTED TO	RS20	464.	4.30	82.	21.	15.	0.30
+	HYDROGRAPH AT	A05A	260.	4.17	37.	9.	7.	0.14
+	ROUTED TO	RA05A	249.	4.43	37.	9.	7.	0.14
+	HYDROGRAPH AT	A99N	341.	4.13	41.	10.	7.	0.16
+	3 COMBINED AT	CA99N	875.	4.37	159.	40.	29.	0.60
+	HYDROGRAPH AT	DRA09S	1.	4.17	0.	0.	0.	0.07
+	ROUTED TO	RA09SW	0.	4.77	0.	0.	0.	0.07
+	HYDROGRAPH AT	A99Y	410.	4.37	45.	11.	8.	0.32
+	2 COMBINED AT	CA99Y	410.	4.37	45.	11.	8.	0.32
+	HYDROGRAPH AT	A99X	723.	4.07	58.	14.	10.	0.26
	HYDROGRAPH AT	DRA09Q	1.	4.40	0.	0.	0.	0.47
+	ROUTED TO	RA09QW	1.	5.00	0.	0.	0.	0.47
+	HYDROGRAPH AT	A10A	423.	4.17	32.	8.	6.	0.19
+	2 COMBINED AT	CA10A	393.	4.17	31.	8.	6.	0.65
+	ROUTED TO	RA10A	355.	4.30	31.	8.	6.	0.65
+	HYDROGRAPH AT	A10	551.	4.10	33.	8.	6.	0.21
+	2 COMBINED AT	CA10	631.	4.17	61.	15.	11.	0.87
+	5 COMBINED AT	DUMMY2	7196.	5.60	4219.	1521.	1158.	62.47
+	HYDROGRAPH AT	DRX11I	58.	5.23	4.	1.	1.	1.34
+	ROUTED TO	RX11W	54.	5.33	4.	1.	1.	1.34
+	HYDROGRAPH AT	A99V	396.	4.23	35.	9.	6.	0.21
	2 COMBINED AT	CA99V	396.	4.23	43.	11.	8.	0.21
+	HYDROGRAPH AT	DRA09L	1.	4.77	0.	0.	0.	1.13

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	ROUTED TO	RA09LW	1.	5.13	0.	0.	0.	1.13
+	HYDROGRAPH AT	A99W	312.	4.23	44.	11.	8.	0.22
+	DIVERSION TO	LA99WD	304.	4.20	14.	4.	3.	0.22
+	HYDROGRAPH AT	LA99W	311.	4.27	30.	7.	5.	0.22
+	2 COMBINED AT	CA99W	311.	4.27	30.	8.	5.	0.22
+	HYDROGRAPH AT	A99U	100.	4.20	9.	2.	2.	0.07
+	HYDROGRAPH AT	A99S	66.	4.43	10.	2.	2.	0.08
+	HYDROGRAPH AT	A08A	86.	4.43	22.	6.	4.	0.14
+	ROUTED TO	RA08A	85.	4.60	22.	6.	4.	0.14
+	HYDROGRAPH AT	A99R	88.	4.07	6.	1.	1.	0.04
+	ROUTED TO	RA99R	73.	4.30	6.	1.	1.	0.04
	HYDROGRAPH AT	A08	218.	4.00	11.	3.	2.	0.08
+	3 COMBINED AT	CA08	227.	4.00	38.	10.	7.	0.25
+	6 COMBINED AT	DUMMY3	7208.	5.60	4241.	1528.	1163.	63.29
+	HYDROGRAPH AT	A99P	959.	4.17	123.	31.	22.	0.57
+	HYDROGRAPH AT	A05	368.	4.03	23.	6.	4.	0.13
+	HYDROGRAPH AT	A99O	299.	4.03	22.	5.	4.	0.10
+	HYDROGRAPH AT	A99M	193.	4.00	17.	4.	3.	0.06
+	HYDROGRAPH AT	A99L	255.	4.00	18.	4.	3.	0.08
+	6 COMBINED AT	DUMMY4	7229.	5.60	4298.	1550.	1182.	64.24
+	HYDROGRAPH AT	A99K	240.	4.07	25.	6.	5.	0.11
+	HYDROGRAPH AT	A99J	242.	4.13	33.	8.	6.	0.14
	HYDROGRAPH AT	A99I	319.	4.10	32.	8.	6.	0.14
	HYDROGRAPH AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		A04A	412.	4.17	51.	13.	9.	0.22
+	ROUTED TO	RA04A	392.	4.30	51.	13.	9.	0.22
+	HYDROGRAPH AT	A04	124.	4.20	9.	2.	2.	0.08
+	2 COMBINED AT	CA04	499.	4.23	61.	15.	11.	0.30
+	ROUTED TO	RA04	463.	4.53	60.	15.	11.	0.30
+	HYDROGRAPH AT	A03D	96.	4.50	14.	3.	2.	0.13
+	2 COMBINED AT	CA03D	557.	4.53	74.	19.	13.	0.43
+	ROUTED TO	RA03D	520.	4.80	74.	19.	13.	0.43
+	HYDROGRAPH AT	A03E	216.	4.17	29.	7.	5.	0.15
+	ROUTED TO	RA03E	208.	4.30	29.	7.	5.	0.15
+	HYDROGRAPH AT	A03B	153.	4.10	10.	2.	2.	0.07
	2 COMBINED AT	CA03B	304.	4.17	39.	10.	7.	0.23
+	ROUTED TO	RA03B	267.	4.70	39.	10.	7.	0.23
+	HYDROGRAPH AT	A03A	249.	4.20	19.	5.	3.	0.14
+	2 COMBINED AT	CA03A	308.	4.57	58.	15.	11.	0.37
+	ROUTED TO	RA03A	303.	4.73	58.	15.	11.	0.37
+	HYDROGRAPH AT	A03	179.	4.67	32.	8.	6.	0.28
+	3 COMBINED AT	CA03	824.	4.77	145.	37.	26.	1.07
+	5 COMBINED AT	DUMMY5	7333.	5.60	4365.	1571.	1199.	65.69
+	HYDROGRAPH AT	A99G	63.	4.00	3.	1.	0.	0.02
+	DIVERSION TO	LA99GD	62.	3.93	2.	0.	0.	0.02
+	HYDROGRAPH AT	LA99G	63.	4.00	1.	0.	0.	0.02
	HYDROGRAPH AT	A99H	35.	4.90	10.	3.	2.	0.10
+	DIVERSION TO	LA99HD	35.	4.90	6.	2.	1.	0.10

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	HYDROGRAPH AT	LA99H	18.	5.90	4.	1.	1.	0.10
+	ROUTED TO	RA99H	10.	6.70	4.	1.	1.	0.10
+	HYDROGRAPH AT	A02D	154.	4.00	6.	2.	1.	0.06
+	DIVERSION TO	LA02DD	148.	3.93	3.	1.	1.	0.06
+	HYDROGRAPH AT	LA02D	154.	4.00	3.	1.	1.	0.06
+	ROUTED TO	RA02D	107.	4.13	3.	1.	1.	0.06
+	HYDROGRAPH AT	A99F	37.	5.03	12.	3.	2.	0.11
+	3 COMBINED AT	CA99F	109.	4.13	18.	5.	3.	0.28
+	HYDROGRAPH AT	A02	32.	4.10	2.	0.	0.	0.02
+	HYDROGRAPH AT	A01H	195.	4.00	9.	2.	2.	0.07
+	DIVERSION TO	LA01HD	192.	3.90	5.	1.	1.	0.07
	HYDROGRAPH AT	LA01H	195.	4.00	4.	1.	1.	0.07
+	HYDROGRAPH AT	A99E	74.	4.00	4.	1.	1.	0.02
+	DIVERSION TO	LA99ED	71.	3.87	2.	0.	0.	0.02
+	HYDROGRAPH AT	LA99E	74.	4.00	2.	1.	0.	0.02
+	6 COMBINED AT	DUMMY6	7333.	5.60	4365.	1571.	1199.	66.10
+	HYDROGRAPH AT	A99B	143.	4.03	7.	2.	1.	0.05
+	HYDROGRAPH AT	A99C	74.	4.00	3.	1.	1.	0.03
+	DIVERSION TO	LA99CD	72.	3.90	2.	0.	0.	0.03
+	HYDROGRAPH AT	LA99C	74.	4.00	2.	0.	0.	0.03
+	HYDROGRAPH AT	A99D	91.	4.00	4.	1.	1.	0.03
+	DIVERSION TO	LA99DD	88.	3.87	2.	0.	0.	0.03
	HYDROGRAPH AT	LA99D	91.	4.00	3.	1.	1.	0.03
	HYDROGRAPH AT							

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	A01A	97.	4.13	7.	2.	1.	0.05
ROUTED TO							
+	RA01A	82.	4.40	7.	2.	1.	0.05
HYDROGRAPH AT							
+	A01	274.	4.27	27.	7.	5.	0.20
2 COMBINED AT							
+	CA01	337.	4.30	34.	9.	6.	0.25
HYDROGRAPH AT							
+	A99A	366.	4.07	25.	6.	5.	0.13
DIVERSION TO							
+	LA99AD	351.	4.00	15.	4.	3.	0.13
HYDROGRAPH AT							
+	LA99A	366.	4.07	11.	3.	2.	0.13
HYDROGRAPH AT							
+	A99	161.	4.27	16.	4.	3.	0.14
7 COMBINED AT							
+	DUMMY7	7322.	5.60	4365.	1571.	1199.	66.72
HYDROGRAPH AT							
+	A01E	218.	4.07	21.	5.	4.	0.08
DIVERSION TO							
+	A01EI	131.	4.07	13.	3.	2.	0.08
HYDROGRAPH AT							
	DA01E	87.	4.07	9.	2.	2.	0.08
ROUTED TO							
+	RA01ES	49.	5.13	9.	2.	2.	0.08
HYDROGRAPH AT							
+	N01A	570.	4.33	56.	14.	10.	0.41
ROUTED TO							
+	RN01A	534.	4.50	56.	14.	10.	0.41
HYDROGRAPH AT							
+	N01	951.	4.20	136.	34.	25.	0.65
3 COMBINED AT							
+	CN01	1019.	4.43	185.	47.	34.	1.14
HYDROGRAPH AT							
+	A03C	529.	4.17	61.	15.	11.	0.33
ROUTED TO							
+	RA03C	501.	4.33	61.	15.	11.	0.33
HYDROGRAPH AT							
+	A02B	760.	4.03	51.	13.	9.	0.27
ROUTED TO							
+	RA02B	702.	4.10	51.	13.	9.	0.27
2 COMBINED AT							
+	CA02A*	941.	4.17	110.	28.	20.	0.60
ROUTED TO							
	RA02A*	869.	4.30	110.	28.	20.	0.60
HYDROGRAPH AT							
+	A02A	530.	4.70	91.	23.	16.	0.61

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
	HYDROGRAPH AT	A01G	599.	4.00	35.	9.	6.	0.19
+	DIVERSION TO	LA01GD	585.	3.87	19.	5.	3.	0.19
+	HYDROGRAPH AT	LA01G	599.	4.00	16.	4.	3.	0.19
+	3 COMBINED AT	CA01G	932.	4.50	194.	49.	35.	1.39
+	ROUTED TO	RA01G	904.	4.63	194.	49.	35.	1.39
+	HYDROGRAPH AT	A02C	462.	4.23	68.	17.	12.	0.33
+	DIVERSION TO	LA02CD	460.	4.23	26.	6.	5.	0.33
+	HYDROGRAPH AT	LA02C	446.	4.30	43.	11.	8.	0.33
+	ROUTED TO	RA02C	334.	4.87	43.	11.	8.	0.33
+	HYDROGRAPH AT	A01F	436.	4.17	57.	14.	10.	0.28
+	DIVERSION TO	LA01FD	324.	4.03	13.	3.	2.	0.28
	HYDROGRAPH AT	LA01F	436.	4.17	43.	11.	8.	0.28
+	2 COMBINED AT	CA01F	416.	4.17	84.	21.	15.	0.61
+	ROUTED TO	RA01F	387.	4.37	84.	21.	15.	0.61
+	HYDROGRAPH AT	A01D	520.	4.13	45.	11.	8.	0.21
+	DIVERSION TO	LA01DD	520.	4.13	26.	6.	5.	0.21
+	HYDROGRAPH AT	LA01D	453.	4.20	19.	5.	3.	0.21
+	HYDROGRAPH AT	DRA01E	131.	4.07	13.	3.	2.	0.08
+	ROUTED TO	RA01EW	124.	4.13	13.	3.	2.	0.08
+	3 COMBINED AT	CA01D	640.	4.33	110.	28.	20.	0.82
+	ROUTED TO	RA01D	555.	4.57	110.	28.	20.	0.82
+	HYDROGRAPH AT	A01C	472.	4.13	56.	14.	10.	0.22
	DIVERSION TO	LA01CD	472.	4.13	31.	8.	6.	0.22
	HYDROGRAPH AT							

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA
		LA01C	424.	4.20	25.	6.	5.	0.22
+	HYDROGRAPH AT	A01B	357.	4.10	19.	5.	3.	0.15
+	DIVERSION TO	LA01BD	337.	4.03	10.	2.	2.	0.15
+	HYDROGRAPH AT	LA01B	357.	4.10	10.	2.	2.	0.15
+	4 COMBINED AT	CA01B	1379.	4.60	293.	74.	53.	2.58

*** NORMAL END OF HEC-1 ***

ACDC SUB-AREA MODEL

```
1*************************************
 *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
 *              MAY   1991           *
 *           VERSION 4.0.1E          *
 *     Lahey F77L-EM/32 version 5.01     *
 *       Dodson & Associates, Inc.       *
 *  RUN DATE  04/30/01  TIME  09:51:23   *
 *************************************
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*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 551-1748          *
*                                   *
*************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX         XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

   1          ID   GLENDALE/PEORIA ADMP UPDATE (FCD 99-44)
   2          ID   ACDC AREA HYDROLOGY MODEL
   3          ID   WATERSHED BETWEEN CAVE CREEK AND SKUNK CREEK
   4          ID   FILENAME: P:\50430001\ENGR\HYDRLGY\EXISTING\W100-6.DAT
   5          ID   JOB NO.: 5043.0001 (PENTACORE ARIZONA)
   6          ID   100-YEAR, 6-HOUR STORM DURATION
   7          ID   SCS TYPE-II DISTRIBUTION
   8          ID   POINT PRECIPITATION ARE REDUCED BASED ON 20 SQ. MILE WATERSHED.
   9          ID
  10          ID   LAST REVISED: 08\15\2000,  BY: KPK & DHN
  11          ID   EXISTING CONDITION
  12          ID   DDMS MCUHP1 USED FOR BASE MODEL DEVELOPMENT
  13          ID
              *DIAGRAM
  14          IT       3 10OCT92    1200     500
  15          IO       5

  16          KK    R381
  17          KM    RETREIVE FLOWS DIVERTED FROM SUBBASIN 381 WESTERLY IN BELL ROAD.
  18          KM    THIS HYDROGRAPH WAS GENERATED AS PART OF THE ORIGINAL KAMINSKY HUBBARD MODEL
  19          KM    VOLUME 1.5 SEALED ON 3\14\95 AND STORED IN FILENAME: W100-6.DSS.
  20          KM
  21          KM   ASSUME 50% FLOW SPLIT AT 51ST AVENUE & BELL ROAD
  22          KM          STORM DRAIN CAPACITY FLOWING SOUTH IN 51ST AVENUE = 32 cfs
  23          KM   SOURCE: Northwest Storm Drain Study
  24          KM           Project ST-74206.00
  25          BA    1.61
  26          ZR    =QI  A=SKUNK CREEK  B=381RE  C=FLOW  F=WEST
              *   ****

  27          KK  381101
  28          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN 381 THROUGH SUBBASIN C386A.
  29          KM            1) Reach Length = 2640 ft.
  30          KM            2) West on Bell Road (C.O.G. Arterial Section A-4).
  31          RD
  32          RC    .030    .020    .030    2640  0.0030
  33          RX     100     100     118     118     212     212     230     230
  34          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

  35          KK   C386A
  36          KM   SUBBASIN C386A
  37          KM     L = 1.40  Kb = .043  Adj. Slope =   22.0
  38          BA    .531
  39          IN      15
  40          KM   RAINFALL DEPTH OF 3.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
  41          KM   AN AREAL REDUCTION COEFFICIENT OF .910 WAS USED
  42          PB    2.73
  43          KM   THE FOLLOWING PC RECORD USED A 6-HOUR STORM WITH A PATTERN No. OF 3.13
  44          PC    .000    .016    .022    .033    .051    .066    .080    .095    .110    .124
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 45          PC    .141    .158    .182    .230    .312    .476    .668    .793    .865    .909
 46          PC    .944    .958    .972    .986   1.000
 47          LG    .230    .190   6.800    .150  26.000
 48          UC    .925    .637
 49          UA       0       5      16      30      65      77      84      90      94      97
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 50          UA     100
             *   ****

 51          KK  DC386A
 52          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
 53          KM   REQUIRED VOLUME = 17.05 AC.-FT.
 54          DT  C386AR   17.05
 55          DI       0   10000
 56          DQ       0   10000

 57          KK    C101
 58          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C386A AND 381101.
 59          HC       2
             *   ****

 60          KK   D101W
 61          KM   DIVERT FLOW FROM SUBBASIN C386A AT CP101.
 62          KM   ASSUME 0.4% SLOPE ON ARTERIAL STREET AND USE RATING TABLE FOR DIVERSION.
 63          KM          24" STORM DRAIN CAPACITY FLOWING WEST IN BELL ROAD = 14 cfs.
 64          DT   D101S
 65          DI       0      14     100     500    1000    2000    2700
 66          DQ       0     0.1       4      59     133     285     400
             *   ****

 67          KK  101102
 68          KM   NORMAL DEPTH ROUTE FLOW FROM SUBBASIN C386A THROUGH SUBBASIN C386B.
 69          KM            1) Reach Length = 2640 ft.
 70          KM            2) West on Bell Road (C.O.G. Arterial Section A-4).
 71          RS       4    FLOW      -1
 72          RC    .030    .020    .030    2640  0.0030
 73          RX     100     100     118     118     212     212     230     230
 74          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

 75          KK   C386B
 76          KM   SUBBASIN C386B
 77          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
 78          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
 79          KM     L = 1.53    Kb = .041  Adj. Slope =   17.0
 80          BA    .541
 81          LG    .210    .170   7.000    .140  36.000
 82          UC   1.021    .755
 83          UA       0       5      16      30      65      77      84      90      94      97
 84          UA     100
             *   ****

 85          KK  DC386B
 86          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
 87          KM   REQUIRED VOLUME = 12.75 AC.-FT.
 88          DT  C386BR   12.75
 89          DI       0   10000
 90          DQ       0   10000
             *   ****
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 91          KK    C102
 92          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C386B AND 101102.
 93          HC       2
             *   ****

 94          KK   D102W
 95          KM   DIVERT FLOW FROM SUBBASIN C386B AT CP102.
 96          KM   ASSUME 50% FLOW SPLIT AT ARTERIAL STREETS.
 97          KM          42" STORM DRAIN CAPACITY FLOWING SOUTH IN 59TH AVENUE = 64 cfs.
 98          DT   D102S
 99          DI       0      64     100     500    1000    5000
100          DQ       0      64      82     282     532    2532
             *   ****

101          KK  102103
102          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C386B THROUGH SUBBASIN C401A.
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103          KM            1) Reach Length = 2640 ft.
104          KM            2) West on Bell Road (C.O.G. Arterial Section A-4).
105          RD
106          RC    .030    .020    .030    2640  0.0030
107          RX     100     100     118     118     212     212     230     230
108          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

109          KK   C401A
110          KM   SUBBASIN C401A
111          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
112          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
113          KM     L =  .70  Kb = .040  Adj. Slope =   17.0
114          BA    .140
115          LG    .210    .230   7.000    .120  33.000
116          UC    .629    .510
117          UA       0       5      16      30      65      77      84      90      94      97
118          UA     100
             *   ****

119          KK  DC401A
120          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
121          KM   REQUIRED VOLUME = 3.78 AC.-FT.
122          DT  C401AR    3.78
123          DI       0   10000
124          DQ       0   10000
             *   ****

125          KK    C103
126          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C401A AND 102103.
127          HC       2

128          KK   D103W
129          KM   DIVERT FLOW FROM SUBBASIN C401A AT CP103.
130          KM   ASSUME 0.5% SLOPE ON ARTERIAL STREET AND USE RATING TABLE FOR DIVERSION.
131          DT   D103S
132          DI       0      10      95     580    1086    3017
133          DQ       0     0.1      14      65     133     400
             *   ****
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

134          KK  103104
135          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C401A THROUGH SUBBASIN C401B.
136          KM            1) Reach Length = 2640 ft.
137          KM            2) West on Bell Road (C.O.G. Arterial Section A-4).
138          RD
139          RC    .030    .020    .030    2640  0.0030
140          RX     100     100     118     118     212     212     230     230
141          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

142          KK   C401B
143          KM   SUBBASIN C401B
144          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
145          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
146          KM     L =  .63  Kb = .036  Adj. Slope =  21.0
147          BA    .099
148          LG    .150    .270   5.100    .280  46.000
149          UC    .533    .475
150          UA       0       5      16      30      65      77      84      90      94      97
151          UA     100
             *   ****

152          KK  DC401B
153          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
154          KM   REQUIRED VOLUME = 1.82 AC.-FT.
155          DT  C401BR    1.82
156          DI       0   10000
157          DQ       0   10000
             *   ****

158          KK    C104
159          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C401B AND  103104.
160          HC       2
             *   ****

161          KK   D104S
162          KM   DIVERT FLOW FROM SUBBASIN C401B AT CP104.
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163          KM   ASSUME 50% FLOW SPLIT AT ARTERIAL STREETS.
164          KM          36" STORM DRAIN CAPACITY FLOWING SOUTH IN 67TH AVENUE = 42 cfs.
165          DT   D104W
166          DI       0      42     100     500    1000    5000
167          DQ       0     0.1      29     229     479    2479
             *   ****

168          KK  104105
169          KM   NORMAL DEPTH ROUTE FLOW FROM SUBBASIN C401B THROUGH SUBBASIN 390B.
170          KM            1) Reach Length = 2100 ft.
171          KM            2) South on 67th Avenue (C.O.G. Arterial Section A-4).
172          RS       3    FLOW      -1
173          RC    .030    .020    .030    2100  0.0030
174          RX     100     100     118     118     212     212     230     230
175          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

176          KK   C390B
177          KM   SUBBASIN C390B
178          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
179          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
180          KM     L =  .62  Kb = .047  Adj. Slope =   17.0
181          BA    .196
182          LG    .230    .150   8.000    .100  39.000
183          UC    .629    .382
184          UA       0       5      16      30      65      77      84      90      94      97
185          UA     100
             *   ****

186          KK  DC390B
187          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
188          KM   REQUIRED VOLUME = 3.97 AC.-FT.
189          DT  C390BR    3.97
190          DI       0   10000
191          DQ       0   10000
             *   ****

192          KK    C105
193          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C390B AND 104105.
194          HC       2
             *   ****

195          KK   D105S
196          KM   DIVERT FLOW FROM SUBBASIN C390B AT CP105.
197          KM   CURRENTLY, NO CURB AND GUTTER EXISTS ALONG WEST HALF 67TH AVENUE FOR
198          KM   SERVERAL SIGNIFICANT REACHES.
199          KM   ASSUME 50% OF FLOW SPLIT TO WEST AND 50% CONTINUE SOUTH AT THIS LOCATION.
200          KM          60" STORM DRAIN CAPACITY FLOWING SOUTH IN 67TH AVENUE = 165 cfs.
201          DT   D105W
202          DI       0     165     500    1000    5000
203          DQ       0     0.1     168     418    2420
             *   ****

204          KK  105112
205          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C401B THROUGH SUBBASIN 390B.
206          KM            1) Reach Length = 2600 ft.
207          KM            2) South on 67th Avenue (C.O.G. Arterial Section A-4).
208          RD
209          RC    .030    .020    .030    2600  0.0030
210          RX     100     100     118     118     212     212     230     230
211          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

212          KK   D101S
213          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP101.
214          DR   D101S
             *   ****
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

215          KK  101106
216          KM   NORMAL DEPTH ROUTE FLOW FROM SUBBASIN C386A THROUGH SUBBASIN C387A.
217          KM            1) Reach Length = 3800 ft.
218          KM            2) Assume Standard Commerical/Industrial Collector Street
219          KM               (C.O.G. Collector Section C-4).
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220          RS       7    FLOW      -1
221          RC    .030    .020    .030    3800  0.0030
222          RX     100     100   111.5   111.5   158.5   158.5     170     170
223          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

224          KK   D102S
225          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP102.
226          DR   D102S
             *   ****

227          KK  102106
228          KM   NORMAL DEPTH ROUTE FLOW FROM SUBBASIN C386A THROUGH SUBBASIN C387A.
229          KM            1) Reach Length = 2120 ft.
230          KM            2) South on 59th Avenue (C.O.G. Arterial Section A-2).
231          RS       3    FLOW      -1
232          RC    .030    .020    .030    2120  0.0030
233          RX     100     100     121     121     189     189     210     210
234          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

235          KK   C387A
236          KM   SUBBASIN C387A
237          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
238          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
239          KM     L = 1.27   Kb = .028  Adj. Slope =   24.0
240          BA    .351
241          LG    .140    .180   8.800    .070  46.000
242          UC    .608    .469
243          UA       0       5      16      30      65      77      84      90      94      97
244          UA     100
             *   ****

245          KK  DC387A
246          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
247          KM   REQUIRED VOLUME = 18.64 AC.-FT.
248          DT  C387AR   18.64
249          DI       0   10000
250          DQ       0   10000
             *   ****

251          KK    C106
252          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C387A, 101106, AND 102106.
253          HC       3
             *   ****
1                                    HEC-1 INPUT                                    PAGE  7

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

254          KK   D106W
255          KM   DIVERT FLOW FROM SUBBASIN C387A AT CP106.
256          KM   CURRENTLY, NO CURB AND GUTTER EXISTS ALONG WEST HALF 59TH AVENUE FOR
257          KM   SEVERAL SIGNIFICANT REACHES.
258          KM   ASSUME 50% OF FLOW SPLIT TO WEST AND 50% CONTINUE SOUTH AT THIS LOCATION.
259          KM          54" STORM DRAIN CAPACITY FLOWING SOUTH IN 59TH AVENUE = 64 cfs.
260          DT   D106S
261          DI       0      64     100     500    1000    5000
262          DQ       0      64      82     282     532    2535
             *   ****

263          KK  106107
264          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C387A THROUGH SUBBASIN C390A.
265          KM            1) Reach Length = 3250 ft.
266          KM            2) Assume Standard Single Family Residential Collector Street
267          KM               (C.O.G. Collector Section C-2).
268          RD
269          RC    .030    .020    .030    3250  0.0030
270          RX     100     100   110.5   110.5   149.5   149.5     160     160
271          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

272          KK   D103S
273          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP103.
274          DR   D103S
             *   ****

275          KK  103107
276          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C401A THROUGH SUBBASIN C390A.
277          KM            1) Reach Length = 3080 ft.
278          KM            2) Assume Standard Commerical/Industrial Collector Street
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279          KM              (C.O.G. Collector Section C-4).
280          RD
281          RC    .030    .020    .030    3080  0.0030
282          RX     100     100   111.5   111.5   158.5   158.5     170     170
283          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

284          KK   C390A
285          KM   SUBBASIN C390A
286          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
287          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
288          KM     L = 1.05  Kb = .041  Adj. Slope =   17.0
289          BA    .297
290          LG    .200    .170   9.700    .050  30.000
291          UC    .775    .579
292          UA       0       5      16      30      65      77      84      90      94      97
293          UA     100
             *   ****
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

294          KK  DC390A
295          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
296          KM   REQUIRED VOLUME = 1.27 AC.-FT.
297          DT  C390AR    1.27
298          DI       0   10000
299          DQ       0   10000
             *   ****

300          KK    C107
301          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C390A, 103107, AND 106107.
302          HC       3
             *   ****

303          KK   D107W
304          KM   DIVERT FLOW FROM SUBBASIN C301B AT CP104.
305          KM   ASSUME 50% OF FLOW WEST IN EXISTING DITCH AND 50% SOUTH ON COLLECTOR STREET.
306          DT   D107S
307          DI       0      10     100     500    1000    5000
308          DQ       0     0.1      55     255     505    2505
             *   ****

309          KK  107112
310          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C390A THROUGH SUBBASIN C390E.
311          KM            1) Reach Length = 2820 ft.
312          KM            2) Existing trapezoid concrete ditch
313          KM               (3' deep, 5' bottom, 2:1 side slope).
314          RD
315          RC    .030    .013    .030    2820  0.0030
316          RX     100     110     120     126     131     137     140     150
317          RY     3.5       3       3       0       0       3       3     3.5
             *   ****

318          KK    R382
319          KM   RETRIEVE FROM SUBBASIN 382 CONCENTRATED IN GREENWAY ROAD AND 51ST AVENUE
320          KM   THIS HYDROGRAPH WAS GENERATED AS PART OF THE ORIGINAL KAMINSKY HUBBARD MODEL
321          KM   VOLUME 3.135 SEALED ON 3\14\95 AND STORED IN FILENAME: W100-6.DSS.
322          KM   THIS HYDROGRAPH ALSO INCLUDES THE FLOW SPLIT ROUTED SOUTH FROM THE
323          KM   INTERSECTION OF BELL ROAD AND 51ST AVENUE WHICH WAS ALSO PART OF THE
324          KM   ORIGINAL MODEL.
325          BA    0.00
326          ZR   =QI  A=SKUNK CREEK B=HC382B C=FLOW  F=WEST
             *   ****

327          KK   D382W
328          KM   (COPIED FROM KAMINSKY-HUBBARD HEC-1 MODEL)
329          KM   DIVERT FLOW FROM SUBBASIN 382 AT GREENWAY ROAD AND 51ST AVENUE
330          KM   ASSUME 50% FLOW SPLIT AT 51ST AVENUE & GREENWAY ROAD
331          KM          STORM DRAIN CAPACITY FLOWING SOUTH IN 51ST AVENUE = 193 cfs
332          KM   SOURCE: Northwest Storm Drain Study
333          KM           Project ST-74206.00
334          DT   D382S
335          DI       0     193     501    1001    5001
336          DQ       0     193     347     597    2597
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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 337          KK  382108
 338          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN 382 THROUGH SUBBASIN C387B.
 339          KM            1) Reach Length = 3040 ft.
 340          KM            2) Assume Standard Single Family Residential Collector Street
 341          KM               (C.O.G. Collector Section C-1).
 342          KM   ROUTING REACH LENGTH REFLECTS ACTUAL FLOWPATH LENGTH AS INDICATED ON THE
 343          KM   ACCOMPANYING WATERSHED.
 344          RD
 345          RC    .030    .020    .030    3040  0.0030
 346          RX     100     100   111.5   111.5   158.5   158.5     170     170
 347          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

 348          KK   C387B
 349          KM   SUBBASIN C387B
 350          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
 351          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
 352          KM     L = 1.18  Kb = .049  Adj. Slope =   19.0
 353          BA    .338
 354          LG    .280    .250   5.400    .250  15.000
 355          UC   1.075    .849
 356          UA       0       5      16      30      65      77      84      90      94      97
 357          UA     100
              *   ****

 358          KK  DC387B
 359          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
 360          KM   REQUIRED VOLUME = 0.21 AC.-FT.
 361          DT  C387BR    0.21
 362          DI       0   10000
 363          DQ       0   10000
              *   ****

 364          KK    C108
 365          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C387B AND 382108.
 366          HC       2

 367          KK   D108W
 368          KM   DIVERT FLOW FROM SUBBASIN C387B AT CP108.
 369          KM   ASSUME 0.3% SLOPE ON ARTERIAL STREET AND RATING TABLE FOR DIVERSION.
 370          DT   D108S
 371          DI       0      20     112     556    1112    2427
 372          DQ       0     0.1      10      80     174     400
              *   ****

 373          KK  108109
 374          KM   NORMAL DEPTH ROUTE FLOW FROM SUBBASIN C387B THROUGH SUBBASIN C387C.
 375          KM            1) Reach Length = 2500 ft.
 376          KM            2) West on Greenway Road (C.O.G. Arterial Section A-1).
 377          RS       2    FLOW      -1
 378          RC    .030    .020    .030    2500  0.0032
 379          RX     100     100     121     121     189     189     210     210
 380          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 381          KK   D106S
 382          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP106.
 383          DR   D106S
              *   ****

 384          KK  106109
 385          KM   NORMAL DEPTH ROUTE FLOW FROM SUBBASIN C387A THROUGH SUBBASIN C387C.
 386          KM       1) Reach Length = 2700 ft.
 387          KM       2) South on 59th Avenue (C.O.G. Arterial Section A-2).
 388          RS       3    FLOW      -1
 389          RC    .030    .020    .030    2700   .0038
 390          RX     100     100     121     121     189     189     210     210
 391          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

 392          KK   C387C
 393          KM   SUBBASIN C387C
 394          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
 395          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
 396          KM     L =  .95  Kb = .049  Adj. Slope =   18.0
 397          BA    .249
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398          LG    .230    .150   8.000    .100  32.000
399          UC    .817    .626
400          UA       0       5      16      30      65      77      84      90      94      97
401          UA     100
             *   ****

402          KK  DC387C
403          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
404          KM   REQUIRED VOLUME = 1.24 AC.-FT.
405          DT  C387CR    1.24
406          DI       0   10000
407          DQ       0   10000
             *   ****

408          KK    C109
409          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C387C, 106109, AND 108109.
410          HC       3
             *   ****

411          KK   D109W
412          KM   DIVERT FLOW FROM SUBBASIN C387C AT CP109.
413          KM   ASSUME 50% FLOW SPLIT AT ARTERIAL STREETS.
414          KM          78" STORM DRAIN CAPACITY FLOWING SOUTH IN 59TH AVENUE = 332 cfs.
415          DT   D109S
416          DI       0     100     332     500    1000    5000
417          DQ       0     100     332     416     666    2666
             *   ****
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

418          KK  109110
419          KM   NORMAL DEPTH ROUTE FLOW FROM SUBBASIN C387C THROUGH SUBBASIN C390C.
420          KM            1) Reach Length = 1300 ft.
421          KM            2) West on Greenway Road (C.O.G. Arterial Section A-1).
422          RS       1    FLOW      -1
423          RC    .030    .020    .030    1300  0.0027
424          RX     100     100     121     121     189     189     210     210
425          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

426          KK   C390C
427          KM   SUBBASIN C390C
428          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
429          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
430          KM     L =  .60  Kb = .051  Adj. Slope =   15.0
431          BA    .095
432          LG    .220    .150   7.300    .130  39.000
433          UC    .683    .616
434          UA       0       5      16      30      65      77      84      90      94      97
435          UA     100
             *   ****

436          KK  DC390C
437          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
438          KM   REQUIRED VOLUME = 1.10 AC.-FT.
439          DT  C390CR    1.10
440          DI       0   10000
441          DQ       0   10000
             *   ****

442          KK    C110
443          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C390C AND 109110.
444          HC       2
             *   ****

445          KK   D110W
446          KM   DIVERT FLOW FROM SUBBASIN C390C AT CP110.
447          KM   ASSUME 0.2% SLOPE ON ARTERIAL STREET AND USE RATING TABLE FOR DIVERSION.
448          DT   D110S
449          DI       0      16      38     469    1046    2055
450          DQ       0     0.1      17      80     195     400
             *   ****

451          KK  110111
452          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C390C THROUGH C390D.
453          KM            1) Reach Length = 1280 ft.
454          KM            2) West on Greenway Road (C.O.G. Arterial Section A-1).
455          RD
456          RC    .030    .020    .030    1280  0.0027
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 457          RX     100     100     121     121     189     189     210     210
 458          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****
1                                        HEC-1 INPUT                                                          PAGE 12

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 459          KK   D107S
 460          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP107.
 461          DR   D107S
              *   ****

 462          KK  107111
 463          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C401A THROUGH SUBBASIN C390A.
 464          KM            1) Reach Length = 1600 ft.
 465          KM            2) Assume Standard Commerical/Industrial Collector Street
 466          KM               (C.O.G. Collector Section C-4).
 467          RD
 468          RC    .030    .020    .030    1600  0.0030
 469          RX     100     100 113.135 113.135   158.5   158.5     170     170
 470          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

 471          KK   C390D
 472          KM   SUBBASIN C390D
 473          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
 474          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
 475          KM     L =  .51  Kb = .057  Adj. Slope =   15.0
 476          BA    .073
 477          LG    .250    .190   6.600    .170  30.000
 478          UC    .688    .633
 479          UA       0       5      16      30      65      77      84      90      94      97
 480          UA     100
              *   ****

 481          KK    C111
 482          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C390D, 107111, AND 110111.
 483          HC       3
              *   ****

 484          KK   D111W
 485          KM   DIVERT FLOW FROM SUBBASIN C390D AT CP111.
 486          KM   ASSUME 0.2% SLOPE ON ARTERIAL STREET AND USE RATING TABLE FOR DIVERSION.
 487          DT   D111S
 488          DI       0      16      38     469    1046    2055
 489          DQ       0     0.1      17      80     195     400
              *   ****

 490          KK  111112
 491          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C390D THROUGH CUB-BASIN C390E.
 492          KM            1) Reach Length = 2400 ft.
 493          KM            2) West on Greenway Road (C.O.G. Arterial Section A-1).
 494          RD
 495          RC    .030    .020    .030    2400  0.0027
 496          RX     100     100     121     121     189     189     210     210
 497          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****
1                                        HEC-1 INPUT                                                          PAGE 13

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 498          KK   C390E
 499          KM   SUBBASIN C390E
 500          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
 501          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
 502          KM     L =  .88  Kb = .048  Adj. Slope =   16.0
 503          BA    .230
 504          LG    .240    .160   8.800    .070  29.000
 505          UC    .796    .599
 506          UA       0       5      16      30      65      77      84      90      94      97
 507          UA     100
              *   ****

 508          KK  DC390E
 509          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
 510          KM   REQUIRED VOLUME = 0.14 AC.-FT.
 511          DT  C390ER    0.14
 512          DI       0   10000
 513          DQ       0   10000
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                 *   ****

514              KK   C112E
515              KM   COMBINE HYDROGRAPHS FROM SUBBASIN C3390E, 105112, 107112, AND 111112.
516              HC       2
                 *   ****

517              KK    C112
518              KM   COMBINE HYDROGRAPHS FROM SUBBASIN C3390E, 105112, 107112, AND 111112.
519              HC       2
                 *   ****

520              KK   D112S
521              KM   DIVERT FLOW FROM SUBBASIN C390E AT CP112.
522              KM   ASSUME 50% FLOW SPLIT AT ARTERIAL STREETS.
523              KM          84" STORM DRAIN CAPACITY FLOWING SOUTH IN 67TH AVENUE = 405 cfs.
524              DT   D112W
525              DI       0     100     405    1000    5000
526              DQ       0     0.1     0.2     298    2300
                 *   ****

527              KK  112113
528              KM   NORMAL DEPTH ROUTE FLOW FROM SUBBASIN C390E THROUGH SUBBASIN 406D.
529              KM            1) Reach Length = 700ft.
530              KM            2) South on 67th Avenue (C.O.G. Arterial Section A-4).
531              RS       1    FLOW      -1
532              RC    .030    .020    .030     700  0.0030
533              RX     100     100     118     212     212     230     230
534              RY     3.5       1    0.25       0       0    0.25       1     3.5
                 *   ****
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LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

535              KK   C406D
536              KM   SUBBASIN C406D
537              KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
538              KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
539              KM     L =  .12  Kb = .032  Adj. Slope =   33.0
540              BA    .033
541              LG    .100    .300   8.000    .070    .000
542              UC    .179    .070
543              UA       0       5      16      30      65      77      84      90      94      97
544              UA     100
                 *   ****

545              KK    C113
546              KM   COMBINE HYDROGRAPHS FROM SUBBASIN C406D AND 112113.
547              KM   ROUTE IN THE THUNDERBIRD PASEO PARK OF THE ACDC.
548              HC       2
                 *   ****

549              KK   D105W
550              KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT WEST AT CP105.
551              DR   D105W
                 *   ****

552              KK  105114
553              KM   NORMAL DEPTH ROUTE FLOW FROM SUBBASIN C390B THROUGH SUBBASIN C406A.
554              KM            1) Reach Length = 1280 ft.
555              KM            2) Assume Standard Single Family Residential Collector Street
556              KM               (C.O.G. Collector Section C-1).
557              RS       2    FLOW      -1
558              RC    .030    .020    .030    1280  0.0030
559              RX     100     100   111.5   111.5   158.5   158.5     170     170
560              RY     3.5       1    0.25       0       0    0.25       1     3.5
                 *   ****

561              KK   C406A
562              KM   SUBBASIN C406A
563              KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
564              KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
565              KM     L =  .51  Kb = .043  Adj. Slope =   13.0
566              BA    .099
567              LG    .190    .270   5.300    .250  36.000
568              UC    .629    .482
569              UA       0       5      16      30      65      77      84      90      94      97
570              UA     100
                 *   ****
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571          KK  DC406A
572          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
573          KM   DIVERT 80% OF THE 100-YR, 2-HR RETENTION VOLUME.
574          KM   REQUIRED VOLUME = 4.67 AC.-FT.
575          DT  C406AR    4.06
576          DI       0   10000
577          DQ       0   10000
             *   ****
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

578          KK    C114
579          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C406A AND 105114.
580          HC       2
             *   ****

581          KK   D114S
582          KM   DIVERT FLOW FROM SUBBASIN C406A AT CP114.
583          KM   ASSUME 50% FLOW SPLIT AT ARTERIAL STREETS.
584          DT   D114W
585          DI       0      10     100     500    1000    5000
586          DQ       0     0.1      45     245     500    2500
             *   ****

587          KK  114115
588          KM   NORMAL DEPTH ROUTE FLOW FROM SUBBASIN C406A THROUGH SUBBASIN C460B.
589          KM            1) Reach Length = 1700 ft.
590          KM            2) Assume Standard Single Family Residential Collector Street
591          KM               (C.O.G. Collector Section C-2).
592          RS       2    FLOW      -1
593          RC    .030    .020    .030    1700  0.0030
594          RX     100     100   110.5   110.5   149.5   149.5     160     160
595          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

596          KK   C406B
597          KM   SUBBASIN C406B
598          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
599          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
600          KM     L =  .56  Kb = .057  Adj. Slope =   12.0
601          BA    .073
602          LG    .250    .150   8.800    .070  30.000
603          UC    .750    .752
604          UA       0       5      16      30      65      77      84      90      94      97
605          UA     100
             *   ****

606          KK    C115
607          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C406B AND 114115.
608          HC       2
             *   ****

609          KK   D115S
610          KM   DIVERT FLOW FROM SUBBASIN C406B AT CP115.
611          KM   ASSUME 0.5% SLOPE ON COLLECTOR STREET AND USE RATING TABLE FOR DIVERSION.
612          KM   CURB AND GUTTER ENDS AT THIS POINT.
613          DT   D115W
614          DI       0      10     100     500    1000    5000
615          DQ       0       5      50     250     500    2500
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

616          KK  115116
617          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C406B THROUGH SUBBASIN C406C.
618          KM            1) Reach Length = 1250 ft.
619          KM            2) Assume Standard Single Family Residential Collector Street
620          KM               (C.O.G. Collector Section C-2).
621          RD
622          RC    .030    .020    .030    1250  0.0030
623          RX     100     100   110.5   110.5   149.5   149.5     160     160
624          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

625          KK   D112W
626          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT WEST AT CP112.
627          DR   D112W
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KK  112116
KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C390B THROUGH SUBBASIN C406A.
KM            1) Reach Length = 1860 ft.
KM            2) West on Greenway Road
KM            3) Assume Standard Single Family Residential Collector Street
KM               (C.O.G. Collector Section C-1).
RD
RC    .030    .020    .030    1860  0.0032
RX     100     100   111.5   111.5   158.5   158.5     170     170
RY     3.5       1    0.25       0       0    0.25       1     3.5
*   ****

KK   C406C
KM   SUBBASIN C406C
KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
KM     L =  .59  Kb = .054  Adj. Slope =    9.0
BA    .073
LG    .230    .150   8.000    .100  36.000
UC    .842    .891
UA       0       5      16      30      65      77      84      90      94      97
UA     100
*   ****

KK  DC406C
KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
KM   REQUIRED VOLUME = 0.55 AC.-FT.
DT   C406R    0.55
DI       0   10000
DQ       0   10000
*   ****

KK    C116
KM   COMBINE HYDROGRAPHS FROM SUBBASIN C406C, 112116, AND 115116.
KM   ROUTE IN THE THUNDERBIRD PASEO PARK OF THE ACDC.
HC       3
*   ****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK   D116S
KM   DIVERT FLOW FROM C116.
KM   SPLIT THE COMBINED FLOWS BETWEEN GREENWAY RD., 48" PIPE  AND THE SPILLWAY.
KM   ASSUME 0.2% SLOPE ON ARTERIAL STREET AND USE THE RATING TABLE FOR DIVERSION.
DT   D116W
DI       0      16     206    1500
DQ       0    15.9      16     663
*   ****

KK   D114W
KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT WEST AT CP114.
DR   D114W
*   ****

KK  114117
KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C406A THROUGH SUBBASIN C406E.
KM            1) Reach Length = 1270 ft.
KM            2) Assume Standard Single Family Residential Collector Street
KM               (C.O.G. Collector Section C-1).
RD
RC    .030    .020    .030    1270  0.0030
RX    - 100     100   111.5   111.5   158.5   158.5     170     170
RY     3.5       1    0.25       0       0    0.25       1     3.5
*   ****

KK   C406E
KM   SUBBASIN C406E
KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
KM     L =  .45  Kb = .059  Adj. Slope =   10.0
BA    .054
LG    .250    .250   4.800    .360  30.000
UC    .837    .847
UA       0       5      16      30      65      77      84      90      94      97
UA     100
*   ****
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687          KK  DC406E
688          KM   DIVERT 80% OF THE 100-YR, 2-HR RETENTION VOLUME.
689          KM   REQUIRED VOLUME = 2.23 AC.-FT.
690          DT  C406ER    1.78
691          DI       0   10000
692          DQ       0   10000
             *   ****

693          KK    C117
694          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C406E AND 114117.
695          HC       2
             *   ****
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

696          KK   D117S
697          KM   DIVERT FLOW FROM SUBBASIN C406E AT CP117.
698          KM   ASSUME 0.2% SLOPE ON LOCAL STREET AND USE RATING TABLE FOR DIVERSION.
699          DT   D117W
700          DI       0      16      38     469    1046    2055
701          DQ       0      .1      17      80     195     400
             *   ****

702          KK  117118
703          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C406E THROUGH SUBBASIN C406F.
704          KM            1) Reach Length = 1850 ft.
705          KM            2) Assume Standard Single Family Residential Collector Street
706          KM               (C.O.G. Collector Section C-2).
707          RD
708          RC    .030    .020    .030    1250  0.0030
709          RX     100     100   110.5   110.5   149.5   149.5     160     160
710          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

711          KK   D115W
712          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT WEST AT CP115.
713          DR   D115W
             *   ****

714          KK  115118
715          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C406C THROUGH SUBBASIN C406F.
716          KM            1) Reach Length = 1220 ft.
717          KM            2) Assume Standard Single Family Residential Collector Street
718          KM               (C.O.G. Collector Section C-2).
719          RD
720          RC    .030    .020    .030    1220  0.0030
721          RX     100     100   110.5   110.5   149.5   149.5     160     160
722          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

723          KK   D116W
724          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT WEST AT C116.
725          DR   D116W
             *   ****

726          KK  116118
727          KM   NORMAL DEPTH ROUTE FLOW FROM C116 TO C118.
728          KM            1) Reach Length = 900 ft.
729          KM            2) West on Greenway Road (C.O.G. Arterial Section C-2).
730          RS       1    FLOW      -1
731          RC    .033    .015    .033     900  0.0020
732          RX     100     100   108.5   108.5   151.5   151.5     160     160
733          RY     3.5       1     .25       0       0     .25       1     3.5
             *   ****
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

734          KK   C406F
735          KM   SUBBASIN C406F
736          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
737          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
738          KM     L =  .57  Kb = .055  Adj. Slope =   14.0
739          BA    .102
740          LG    .250    .250   5.800    .230  30.000
741          UC    .762    .642
742          UA       0       5      16      30      65      77      84      90      94      97
743          UA     100
```

```
*   ****

KK    C118
KM   COMBINE HYDROGRAPHS FROM SUBBASIN C406F, 115118, AND 117118.
KM   ROUTE IN THE THUNDERBIRD PASEO PARK OF THE ACDC.
HC       4
*   ****

KK   D117W
KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT WEST AT CP115.
DR   D117W
*   ****

KK  117119
KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C406E THROUGH SUBBASIN C406G.
KM            1) Reach Length = 1550 ft.
KM            2) Assume trapezoid dirt ditch
KM               (2' deep, 15' bottom, 6:1 side slope).
RD
RC    .030    .030    .030    1550  0.0030
RX     100     110     120     132     147     159     165     170
RY       3     2.5       2       0       0       2     2.5       3
*   ****

KK   C406G
KM   SUBBASIN C406G
KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
KM     L =  .97  Kb = .042  Adj. Slope =   14.0
BA    .108
LG    .170    .300   4.900    .280  15.000
UC    .979   1.254
UA       0       5      16      30      65      77      84      90      94      97
UA     100
*   ****

KK  DC406G
KM   DIVERT 80% OF THE 100-YR, 2-HR RETENTION VOLUME.
KM   REQUIRED VOLUME = 2.46 AC.-FT.
DT  C406GR    1.97
DI       0   10000
DQ       0   10000
*   ****
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK    C119
KM   COMBINE HYDROGRAPHS FROM SUBBASIN C406G AND 117119.
KM   ROUTE IN THE THUNDERBIRD PASEO PARK OF THE ACDC.
HC       2
*   ****

KK   C406H
KM   SUBBASIN C406H
KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
KM     L = 1.27  Kb = .058  Adj. Slope =   20.0
BA    .269
LG    .150    .310   5.300    .280    .000
UC   1.467   1.440
UA       0       5      16      30      65      77      84      90      94      97
UA     100
*   ****

KK  INTRM1
KM   COMBINE ALL HYDROGRAPHS ENTERING ACDC BETWEEN 67TH AVENUE AND 75TH AVENUE
KM   AND CLEAR STACK.
HC       5
*   ****

KK   D382S
KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT AT 51ST AVENUE AND GREENWAY ROAD.
DR   D382S
*   ****

KK  382120
KM   NORMAL DEPTH ROUTE FROM DIVERSION SOUTH AT CP382 TO CP120.
KM            1) Reach Length = 2550 ft.
KM            2) South on 51st Avenue (C.O.G. Arterial Section A-4).
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801          RS       1    FLOW      -1
802          RC    .030    .020    .030    2550  0.0030
803          RX     100     100     118     118     212     212     230     230
804          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

805          KK   D120W
806          KM   DIVERT FLOW FROM FLOW SPLIT SOUTH (FROM SUBBASIN 382) AT CP120.
807          KM   ASSUME 0.2% WEST ON COLLECTOR STREET AND USE RATING TABLE FOR DIVERSION.
808          KM          STORM DRAIN CAPACITY FLOWING SOUTH IN 51ST AVENUE = 193 cfs.
809          KM   SOURCE: Northwest Storm Drain Study
810          KM           Project ST-74206.00
811          DT   D120S
812          DI       0      20     193     500    1000    2055
813          DQ       0    19.9   192.9     326     523    1020
             *   ****
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

814          KK  120121
815          KM   NORMAL DEPTH ROUTE FLOW FROM DIVERSON WEST AT CP120 THROUGH SUBBASIN
816          KM   C388A.
817          KM            1) Reach Length = 2680 ft.
818          KM            2) Assume Standard Single Family Residential Collector Street
819          KM               (C.O.G. Collector Section C-1).
820          RS       2    FLOW      -1
821          RC    .030    .020    .030    2680  0.0030
822          RX     100     100   111.5   111.5   158.5   158.5     170     170
823          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

824          KK   D108S
825          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP108.
826          DR   D108S
             *   ****

827          KK  108121
828          KM   NORMAL DEPTH ROUTE FLOW FROM SUBBASIN C387B THROUGH SUBBASIN C388A.
829          KM            1) Reach Length = 2720 ft.
830          KM            2) Assume Standard Single Family Residential Collector Street
831          KM               (C.O.G. Collector Section C-1).
832          RS       3    FLOW      -1
833          RC    .030    .020    .030    2720  0.0030
834          RX     100     100   111.5   111.5   158.5   158.5     170     170
835          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

836          KK   C388A
837          KM   SUBBASIN C388A
838          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
839          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
840          KM     L =  .92  Kb = .050  Adj. Slope =   17.0
841          BA    .259
842          LG    .240    .250   5.700    .250  30.000
843          UC    .917    .679
844          UA       0       5      16      30      65      77      84      90      94      97
845          UA     100
             *   ****

846          KK    C121
847          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C388A, 108121, AND 383121.
848          HC       3
             *   ****

849          KK   D121W
850          KM   DIVERT FLOW FROM SUBBASIN C388A AT CP123.13
851          KM   ASSUME 50% FLOW SPLIT AT COLLECTOR STREETS.
852          DT   D121S
853          DI       0      10     100     500    1000    5000
854          DQ       0     0.1      45     245     500    2500
             *   ****
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

855          KK  121123
856          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C388A THROUGH SUBBASIN C388B.
857          KM            1) Reach Length = 3640 ft.
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858          KM            2) Assume Standard Single Family Residential Collector Street
859          KM               (C.O.G. Collector Section C-1).
860          RD
861          RC    .030    .020    .030    3640  0.0030
862          RX     100     100   111.5   111.5   158.5   158.5     170     170
863          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

864          KK   D109S
865          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP109.
866          DR   D109S
             *   ****

867          KK  109122
868          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C387C THROUGH SUBBASIN C388B.
869          KM            1) Reach Length = 1560 ft.
870          KM            2) South on 59th Avenue (C.O.G. Arterial Section A-2).
871          RD
872          RC    .030    .020    .030    1560  0.0027
873          RX     100     100     121     121     189     189     210     210
874          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

875          KK   D122S
876          KM   DIVERT FLOW FROM SUBBASIN C387C FLOW SPLIT SOUTH AT CP122.
877          KM   ASSUME 0.3% SLOPE ON ARTERIAL STREET AND USE RATING TABLE FOR DIVERSION.
878          KM          78" STORM DRAIN CAPACITY FLOWING SOUTH IN 59TH AVENUE = 332 cfs.
879          DT   D122W
880          DI       0     100     332     500    1000    3000
881          DQ       0     0.1     0.2      17      76     352
             *   ****

882          KK  122123
883          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM CP122 THROUGH SUBBASIN C388B.
884          KM            1) Reach Length = 2200 ft.
885          KM            2) South on 59th Avenue (C.O.G. Arterial Section A-2).
886          RD
887          RC    .030    .020    .030    2200  0.0027
888          RX     100     100     121     121     189     189     210     210
889          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

890          KK   C388B
891          KM   SUBBASIN C388B
892          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
893          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
894          KM     L =  .84  Kb = .040  Adj. Slope =   20.0
895          BA    .340
896          LG    .200    .260   6.400    .160  23.000
897          UC    .683    .390
898          UA       0       5      16      30      65      77      84      90      94      97
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

899          UA     100
             *   ****

900          KK  DC388B
901          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
902          KM   DIVERT 80% OF THE 100-YR, 2-HR RETENTION VOLUME.
903          KM   REQUIRED VOLUME = 13.1 AC.-FT.
904          DT  C388BR   11.16
905          DI       0   10000
906          DQ       0   10000
             *   ****

907          KK    C123
908          KM   COMBINE HYDROGRAPHS FROM SUBBASINS CC388B, 121123, AND 122123.
909          HC       3
             *   ****

910          KK   D123S
911          KM   DIVERT FLOW FROM SUBBASIN C388B AT CP123.
912          KM   ASSUME 0.2% SLOPE ON ARTERIAL STREET AND USE RATING TABLE FOR DIVERSION.
913          KM          60" STORM DRAIN CAPACITY FLOWING SOUTH IN 59TH AVENUE = 165 cfs.
914          DT   D123W
915          DI       0     165     500    1000    2000
916          DQ       0     0.1      54      70     355
             *   ****
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917          KK  123126
918          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C388B THROUGH SUBBASIN C388E.
919          KM            1) Reach Length = 1300 ft.
920          KM            2) South on 59th Avenue (C.O.G. Arterial Section A-2).
921          RD
922          RC    .030    .020    .030    1300  0.0027
923          RX     100     100     121     121     189     189     210     210
924          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

925          KK   DT383
926          KM   RETRIEVE FLOWS REMAINING FROM RETENTION DIVERSION OPERATION FOR SUBBASIN 383
927          KM   THIS HYDROGRAPH WAS GENERATED AS PART OF THE ORIGINAL KAMINSKY HUBBARD MODEL
928          KM   VOLUME 1.5 SEALED ON 3\14\95 AND STORED IN FILENAME: W100-6.DSS.
929          BA    0.99
930          ZR   =QI  A=SKUNK CREEK  B=DT383  C=FLOW  F=WEST
             *   ****

931          KK   RM383
932          KM   RETRIEVE FLOWS DIVERTED WEST FROM SUBBASIN 377 IN THUBDERBIRD ROAD.
933          KM   THIS HYDROGRAPH WAS GENERATED AS PART OF THE ORIGINAL KAMINSKY HUBBARD MODEL
934          KM   VOLUME 1.5 SEALED ON 3\14\95 AND STORED IN FILENAME: W100-6.DSS.
935          BA    1.98
936          ZR   =QI  A=SKUNK CREEK  B=RM383  C=FLOW  F=WEST
             *   ****
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

937          KK   D120S
938          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP120.
939          DR   D120S
             *   ****

940          KK  120383
941          KM   MUSKINGUM-CUNGE ROUTE FROM DIVERSION SOUTH AT CP120 TO CP383.
942          KM            1) Reach Length = 2550 ft.
943          KM            2) South on 51st Avenue (C.O.G. Arterial Section A-4).
944          RD
945          RC    .030    .020    .030    2550  0.0030
946          RX     100     100     118     118     212     212     230     230
947          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

948          KK    C383
949          KM   COMBINE RETRIEVE HYDROGRAPH FROM KAMINSKY & HUBBARD MODEL TO OBTAIN FLOWS
950          KM   CONCENTRATED AT THUNDERBIRD ROAD AND 51ST AVENUE INCLUDING AT SOUTH
951          KM   DIVERTED FLOWS FROM CONCENTRATED POINT 120.
952          HC       3
             *   ****

953          KK   D383W
954          KM   DIVERT FLOWS CONCENTRATED AT THUNDERBIRD ROAD AND 51ST AVENUE WEST AND SOUTH.
955          KM   DIVERSION RATING BASED ON FLOW SPLIT RELATION DOCUMENTED IN KAMINISKY-
956          KM   HUBBARD MODEL AS FOLLOWS:
957          KM   ASSUME 50% SPLIT FLOW AT 51ST AVENUE AND THUDERBIRD ROAD.
958          KM          STORM DRAIN CAPACITY FLOWING SOUTH IN 51ST AVENUE = 193 cfs
959          KM   SOURCE: Northwest Storm Drain Study
960          KM           Project ST-74206.00
961          DT   D383S
962          DI       0     193     501    1001    5001
963          DQ       0     193     347     597    2597
             *   ****

964          KK  383124
965          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN 383 THROUGH SUBBASIN C388C.
966          KM            1) Reach Length = 760 ft.
967          KM            2) West on Thunderbird Road (C.O.G. Arterial Section A-2).
968          RD
969          RC    .030    .020    .030     760  0.0030
970          RX     100     100     121     121     189     189     210     210
971          RY     3.5       1    0.25       0       0    0.25       1     3.5
             *   ****

972          KK   C388C
973          KM   SUBBASIN C388C
974          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
975          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
976          KM     L =  .45  Kb = .050  Adj. Slope =   23.0
977          BA    .053
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 978          LG    .200    .150   7.600    .120  45.000
 979          UC    .492    .474
 980          UA       0       5      16      30      65      77      84      90      94      97
1                                          HEC-1 INPUT                                                    PAGE 25

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 981          UA     100
              *   ****

 982          KK  DC388C
 983          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
 984          KM   REQUIRED VOLUME = 1.09 AC.-FT.
 985          DT  C388CR    1.09
 986          DI       0   10000
 987          DQ       0   10000
              *   ****

 988          KK    C124
 989          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C388C AND 383124.
 990          HC       2
              *   ****

 991          KK   D124W
 992          KM   DIVERT FLOW FROM SUBBASIN C3388C AT CP124.
 993          KM   ASSUME 0.5% SLOPE ON ARTERIAL STREET AND USE RATING TABLE FOR DIVERSION.
 994          KM          30" STORM DRAIN CAPACITY FLOWING WEST IN THUNDBIRD ROAD = 26 cfs.
 995          DT   D124S
 996          DI       0       5      41      80    1086    3017
 997          DQ       0     0.1      10      65     133     400
              *   ****

 998          KK  124125
 999          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C388C THROUGH SUBBASIN C388D.
1000          KM            1) Reach Length = 1850 ft.
1001          KM            2) West on Thunderbird Road (C.O.G. Arterial Section A-2).
1002          RD
1003          RC    .030    .020    .030    1850  0.0030
1004          RX     100     100     121     121     189     189     210     210
1005          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1006          KK   D121S
1007          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP121.
1008          DR   D121S
              *   ****

1009          KK  121125
1010          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C388A THROUGH SUBBASIN C388D.
1011          KM            1) Reach Length = 2420 ft.
1012          KM            2) Assume Standard Single Family Residential Collector Street
1013          KM               (C.O.G. Collector Section C-1).
1014          RD
1015          RC    .030    .020    .030    2420  0.0030
1016          RX     100     100   111.5   111.5   158.5   158.5     170     170
1017          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****
1                                          HEC-1 INPUT                                                    PAGE 26

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1018          KK   C388D
1019          KM   SUBBASIN C388D
1020          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1021          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1022          KM     L =  .93  Kb = .051  Adj. Slope =   19.0
1023          BA    .190
1024          LG    .230    .210   6.400    .190  37.000
1025          UC    .846    .747
1026          UA       0       5      16      30      65      77      84      90      94      97
1027          UA     100
              *   ****

1028          KK  DC388D
1029          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
1030          KM   REQUIRED VOLUME = 2.10 AC.-FT.
1031          DT  C388DR    2.10
1032          DI       0   10000
1033          DQ       0   10000
              *   ****
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```
1034          KK    C125
1035          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C388D, 121125, AND 124125.
1036          HC       3
              *   ****

1037          KK   D125W
1038          KM   DIVERT FLOW FROM SUBBASIN C388D AT CP125.
1039          KM   ASSUME 0.4% SLOPE ON ARTERIAL STREET AND USE RATING TABLE FOR DIVERSION.
1040          KM          60" STORM DRAIN CAPACITY FLOWING WEST IN THUNDBIRD ROAD = 165 cfs.
1041          DT   D125S
1042          DI       0     165     500    1000    2741
1043          DQ       0     0.1      38     110     375
              *   ****

1044          KK  125126
1045          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C388D THROUGH SUBBASIN C388E.
1046          KM            1) Reach Length = 2620 ft.
1047          KM            2) West on Thunderbird Road (C.O.G. Arterial Section A-2).
1048          RD
1049          RC    .030    .020    .030    2620  0.0030
1050          RX     100     100     121     121     189     189     210     210
1051          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1052          KK   C388E
1053          KM   SUBBASIN C388E
1054          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1055          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1056          KM     L =  .82  Kb = .044  Adj. Slope =   13.0
1057          BA    .151
1058          LG    .200    .280   5.600    .230  30.000
1059          UC    .863    .787
1060          UA       0       5      16      30      65      77      84      90      94      97
1061          UA     100
              *   ****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1062          KK  DC388E
1063          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
1064          KM   DIVERT 80% OF THE 100-YR, 2-HR RETENTION VOLUME.
1065          KM   REQUIRED VOLUME = 3.57 AC.-FT.
1066          DT  C388ER    3.23
1067          DI       0   10000
1068          DQ       0   10000
              *   ****

1069          KK    C126
1070          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C388E, 123126, AND 125126.
1071          HC       3
              *   ****

1072          KK   D126S
1073          KM   DIVERT FLOW FROM SUBBASIN C388E AT CP126.
1074          KM   ASSUME 50% FLOW SPLIT AT ARTERIAL STREETS.
1075          KM          96" STORM DRAIN CAPACITY FLOWING WEST IN THUNDBIRD ROAD = 578 cfs.
1076          DT   D126W
1077          DI       0     100     578    1000    5000
1078          DQ       0    99.9   577.9     789    2789
              *   ****

1079          KK  126127
1080          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C388E THROUGH SUBBASIN 389C.
1081          KM            1) Reach Length = 550 ft.
1082          KM            2) South on 59th Avenue (C.O.G. Arterial Section A-2).
1083          RD
1084          RC    .030    .020    .030     550  0.0027
1085          RX     100     100     121     121     189     189     210     210
1086          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1087          KK   C389C
1088          KM   SUBBASIN C389C
1089          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1090          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1091          KM     L =  .65  Kb = .030  Adj. Slope =   25.0
1092          BA    .069
1093          LG    .130    .210   6.400    .210  66.000
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1094          UC    .438    .481
1095          UA       0       5      16      30      65      77      84      90      94      97
1096          UA     100
              *   ****

1097          KK  DC389C
1098          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
1099          KM   REQUIRED VOLUME = 4.55 AC.-FT.
1100          DT  C389CR    4.55
1101          DI       0   10000
1102          DQ       0   10000
              *   ****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1103          KK    C127
1104          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C388C AND 126127.
1105          HC       2
              *   ****

1106          KK   C391M
1107          KM   SUBBASIN C391M
1108          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1109          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1110          KM     L =  .07  Kb = .034  Adj. Slope =   36.0
1111          BA    .013
1112          LG    .100    .250   5.600    .310  80.000
1113          UC    .133    .056
1114          UA       0       5      16      30      65      77      84      90      94      97
1115          UA     100
              *   ****

1116          KK    C128
1117          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C391M AND CP127.
1118          HC       2
              *   ****

1119          KK   C391L
1120          KM   SUBBASIN C391L
1121          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1122          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1123          KM     L =  .13  Kb = .034  Adj. Slope =   15.0
1124          BA    .016
1125          LG    .100    .250   4.900    .410  80.000
1126          UC    .237    .155
1127          UA       0       5      16      30      65      77      84      90      94      97
1128          UA     100
              *   ****

1129          KK  DC391L
1130          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
1131          KM   REQUIRED VOLUME = 1.10 AC.-FT.
1132          DT  C391LR    1.10
1133          DI       0   10000
1134          DQ       0   10000
              *   ****

1135          KK   D126W
1136          KM   RETRIEVE HYDROGRAPH FROM FLOW CONVEY IN STORM DRAIN WEST AT CP126.
1137          DR   D126W
              *   ****

1138          KK  126129
1139          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C388E THROUGH SUBBASIN C391L.
1140          KM   ASSUME FLOW OVER TOP STORM DRAIN INTO STREET AND LOT.
1141          KM            1) Reach Length = 180 ft.
1142          KM            2) West on Thunderbird Road (C.O.G. Arterial Section A-2).
1143          RD
1144          RC    .030    .020    .030     180  0.0030
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1145          RX     100     100     121     121     189     189     210     210
1146          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1147          KK    C129
1148          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C391L AND  126129.
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1149          HC       2
              *   ****

1150          KK   C391I
1151          KM   SUBBASIN C391I
1152          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1153          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1154          KM     L =  .49  Kb = .058  Adj. Slope =   18.0
1155          BA    .059
1156          LG    .250    .190   6.600    .170  30.000
1157          UC    .637    .637
1158          UA       0       5      16      30      65      77      84      90      94      97
1159          UA     100
              *   ****

1160          KK   D123W
1161          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT WEST AT CP123.
1162          DR   D123W
              *   ****

1163          KK  123132
1164          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C388B THROUGH SUBBASIN C391I.
1165          KM            1) Reach Length = 1160 ft.
1166          KM            2) Assume Local Street Section.
1167          RD
1168          RC    .030    .018    .030    1160  0.0030
1169          RX     100     100   107.5   107.5   142.5   142.5     150     150
1170          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1171          KK    C132
1172          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C391I AND 123132.
1173          HC       2
              *   ****

1174          KK   D132W
1175          KM   DIVERT FLOW FROM SUBBASIN C391I TO CP130.
1176          KM   ASSUME DIVERT 90% OF FLOW WEST TO ACDC AND 10% NORTH AT HIGH POINT.
1177          KM   HYDROGRAPH TO ACDC AS CP133.
1178          DT   D132S
1179          DI       0      37      89     408    1096    2048
1180          DQ       0      20      47     211     559    1339
              *   ****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1181          KK  132133
1182          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C391I THROUGH SUBBASIN C391J.
1183          KM   HYDROGRAPH TO ACDC AS CP133.
1184          KM            1) Reach Length = 160 ft.
1185          KM            2) Assume Local Street Section.
1186          RD
1187          RC    .030    .018    .030     160  0.0030
1188          RX     100     100   107.5   107.5   142.5   142.5     150     150
1189          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1190          KK   C391J
1191          KM   SUBBASIN C391J
1192          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1193          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1194          KM     L =  .15  Kb = .070  Adj. Slope =   10.0
1195          BA    .008
1196          LG    .250    .150   8.800    .070  30.000
1197          UC    .433    .503
1198          UA       0       5      16      30      65      77      84      90      94      97
1199          UA     100
              *   ****

1200          KK    C133
1201          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C391J AND 132133.
1202          HC       2
              *   ****

1203          KK   D132S
1204          KM   RETRIEVE HYDROGRAPH FOM FLOW SPLIT SOUTH AT CP132.
1205          DR   D132S
              *   ****
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1206          KK   C391K
1207          KM   SUBBASIN C391K
1208          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1209          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1210          KM     L =  .30  Kb = .063  Adj. Slope =   15.0
1211          BA    .026
1212          LG    .250    .250   5.200    .300  30.000
1213          UC    .575    .612
1214          UA       0       5      16      30      65      77      84      90      94      97
1215          UA     100
              *   ****

1216          KK    C130
1217          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C391K AND D132S.
1218          KM   HYDROGRAPH TO ACDC AT CP131 - NO ROUTING.
1219          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1220          KK   C391E
1221          KM   SUBBASIN C391E
1222          KM   HYDROGRAPH TO ACDC AS CP134.
1223          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1224          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1225          KM     L =  .53  Kb = .056  Adj. Slope =   15.0
1226          BA    .086
1227          LG    .250    .150   8.000    .100  30.000
1228          UC    .675    .583
1229          UA       0       5      16      30      65      77      84      90      94      97
1230          UA     100
              *   ****

1231          KK  INTRM2
1232          KM   COMBINE HYDROGRAPHS FROM CP128 TO CP134.
1233          HC       5
              *   ****

1234          KK   C391A
1235          KM   SUBBASIN C391A
1236          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1237          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1238          KM     L =  .67  Kb = .053  Adj. Slope =   14.0
1239          BA    .108
1240          LG    .240    .150   8.800    .070  38.000
1241          UC    .750    .694
1242          UA       0       5      16      30      65      77      84      90      94      97
1243          UA     100
              *   ****

1244          KK  DC391A
1245          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
1246          KM   REQUIRED VOLUME = 2.42 AC.-FT.
1247          DT  C391AR    2.42
1248          DI       0   10000
1249          DQ       0   10000
              *   ****

1250          KK   D110S
1251          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP110.
1252          DR   D110S
              *   ****

1253          KK  110136
1254          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C390C THROUGH SUBBASIN C391A.
1255          KM            1) Reach Length = 2350 ft.
1256          KM            2) Assume Standard Single Family Residential Collector Street
1257          KM               (C.O.G. Collector Section C-2).
1258          RD
1259          RC    .030    .020    .030    2350  0.0030
1260          RX     100     100   110.5   110.5   149.5   149.5     160     160
1261          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1262          KK   D122W
1263          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT WEST AT CP122.
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1264          DR   D122W
              *   ****

1265          KK  122136
1266          KM   NORMAL DEPTH ROUTE FLOW FROM SUBBASIN C388B THROUGH SUBBASIN C391A.
1267          KM            1) Reach Length = 2200 ft.
1268          KM            2) Assume Standard Commerical/Industrial/Multi-Family
1269          KM               Collector Street (C.O.G. Collector Section C-4).
1270          RS       4    FLOW      -1
1271          RC    .030    .020    .030    2200  0.0030
1272          RX     100     100   111.5   111.5   158.5   158.5     170     170
1273          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1274          KK   C391B
1275          KM   SUBBASIN C391B
1276          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1277          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1278          KM     L =  .45  Kb = .059  Adj. Slope =   14.0
1279          BA    .056
1280          LG    .250    .150   7.600    .120  30.000
1281          UC    .654    .631
1282          UA       0       5      16      30      65      77      84      90      94      97
1283          UA     100
              *   ****

1284          KK   D135S
1285          KM   DIVERT FLOW FROM SUBBASIN C391B AT CP135.
1286          KM   ASSUME 50% FLOW SPLIT AT COLLECTOR STREETS.
1287          DT   D135W
1288          DI       0      10     100     500    1000    5000
1289          DQ       0     0.1      45     245     500    2500
              *   ****

1290          KK  135136
1291          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C391B THROUGH SUBBASIN C391A.
1292          KM            1) Reach Length = 530 ft.
1293          KM            2) Assume Standard Single Family Residential Collector Street
1294          KM               (C.O.G. Collector Section C-2).
1295          RD
1296          RC    .030    .020    .030     530  0.0030
1297          RX     100     100   110.5   110.5   149.5   149.5     160     160
1298          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1299          KK    C136
1300          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C391A, 110136, 122136, AND 135136.
1301          HC       4
              *   ****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1302          KK   D136S
1303          KM   ASSUME 50% FLOW SPLIT SOUTH ON COLLECTOR STREET AND WEST IN SCHOOL
1304          KM          DRAINAGE EASEMENT.
1305          KM          48" STORM DRAIN CAPACITY FLOWING SOUTHWEST TO ACDC = 51 cfs.
1306          DT   D136W
1307          DI       0      51     100     500    1000    5000
1308          DQ       0    50.9      75     275     525    2525
              *   ****

1309          KK  136137
1310          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C391A THROUGH SUBBASIN C391F.
1311          KM            1) Reach Length = 840 ft.
1312          KM            2) Assume Local Street Section.
1313          RD
1314          RC    .030    .018    .030     840  0.0030
1315          RX     100     100   107.5   107.5   142.5   142.5     150     150
1316          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1317          KK   C391F
1318          KM   SUBBASIN C391F
1319          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1320          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1321          KM     L =  .23  Kb = .065  Adj. Slope =   15.0
1322          BA    .019
1323          LG    .250    .150   8.800    .070  30.000
1324          UC    .458    .460
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1325          UA       0       5      16      30      65      77      84      90      94      97
1326          UA     100
              *   ****

1327          KK    C137
1328          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C391F AND 136137.
1329          HC       2
              *   ****

1330          KK   C391G
1331          KM   SUBBASIN C391G
1332          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1333          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1334          KM     L =  .32  Kb = .065  Adj. Slope =   11.0
1335          BA    .021
1336          LG    .250    .150   9.700    .060  30.000
1337          UC    .608    .775
1338          UA       0       5      16      30      65      77      84      90      94      97
1339          UA     100
              *   ****

1340          KK   D136W
1341          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT WEST AT CP136.
1342          DR   D136W
              *   ****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1343          KK  136138
1344          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C391A THROUGH SUB-BSAIN C391G.
1345          KM            1) Reach Length = 950 ft.
1346          KM            2) Assume trapezoid dirt ditch
1347          KM               (3' deep, 5' bottom, 4:1 side slope).
1348          RD
1349          RC    .030    .030    .030     950  0.0030
1350          RX     100     110     120     132     137     149     155     160
1351          RY       4     3.5       3       0       0       3     3.5       4
              *   ****

1352          KK    C138
1353          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C391G AND 136138.
1354          HC       2
              *   ****

1355          KK   C391C
1356          KM   SUBBASIN C391C
1357          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1358          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1359          KM     L =  .59  Kb = .058  Adj. Slope =   14.0
1360          BA    .067
1361          LG    .250    .130  10.100    .040  30.000
1362          UC    .729    .798
1363          UA       0       5      16      30      65      77      84      90      94      97
1364          UA     100
              *   ****

1365          KK   D111S
1366          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP111.
1367          DR   D111S
              *   ****

1368          KK  111139
1369          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C390D THROUGH SUBBASIN C391C.
1370          KM            1) Reach Length = 2580 ft.
1371          KM            2) Assume Local Street Section.
1372          RD
1373          RC    .030    .018    .030    2580  0.0030
1374          RX     100     100   107.5   107.5   142.5   142.5     150     150
1375          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1376          KK   D139S
1377          KM   DIVERT FLOW FROM SUBBASIN C390D FLOW SPLIT SOUTH AT CP139.
1378          KM   ASSUME 85% SOUTH ON COLLECTOR STREET AND 15% WEST ON LOCAL STREET.
1379          DT   D139W
1380          DI       0      10     100     500    1000    5000
1381          DQ       0     0.1      14      74     150     750
              *   ****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1382          KK  139140
1383          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM CP139 TO CP140.
1384          KM            1) Reach Length = 130 ft.
1385          KM            2) Assume Local Street Section.
1386          RD
1387          RC    .030    .018    .030     130  0.0030
1388          RX     100     100   107.5   107.5   142.5   142.5     150     150
1389          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1390          KK   D140W
1391          KM   DIVERT FLOW FROM SUBBASIN C391C AT CP140.
1392          KM   ASSUME 50% WEST ON LOCAL STREET AND 50% SOUTH ON COLLECTOR STREET.
1393          DT   D140S
1394          DI       0      10     100     500    1000    5000
1395          DQ       0       5      50     250     500    2500
              *   ****

1396          KK  140141
1397          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM CP140 TO CP141.
1398          KM            1) Reach Length = 350 ft.
1399          KM            2) Assume Local Street Section.
1400          RD
1401          RC    .030    .018    .030     350  0.0030
1402          RX     100     100   107.5   107.5   142.5   142.5     150     150
1403          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1404          KK    C141
1405          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C391C AND 140141.
1406          HC       2
              *   ****

1407          KK   C391H
1408          KM   SUBBASIN C391H
1409          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1410          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1411          KM     L =  .37  Kb = .060  Adj. Slope =   11.0
1412          BA    .046
1413          LG    .250    .150   9.700    .060  30.000
1414          UC    .629    .578
1415          UA       0       5      16      30      65      77      84      90      94      97
1416          UA     100
              *   ****

1417          KK   D135W
1418          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT WEST AT CP135.
1419          DR   D135W
              *   ****
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1420          KK  135142
1421          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C391B THROUGH SUBBASIN C391H.
1422          KM            1) Reach Length = 1200 ft.
1423          KM            2) Assume Local Street Section.
1424          RD
1425          RC    .030    .018    .030    1200  0.0030
1426          RX     100     100   107.5   107.5   142.5   142.5     150     150
1427          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1428          KK   D140S
1429          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP140.
1430          DR   D140S
              *   ****

1431          KK  140142
1432          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C391C THROUGH SUBBASIN C391H.
1433          KM            1) Reach Length = 980 ft.
1434          KM            2) Assume Local Street Section.
1435          RD
1436          RC    .030    .018    .030     980  0.0030
1437          RX     100     100   107.5   107.5   142.5   142.5     150     150
1438          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****
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1439          KK    C142
1440          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C391H, 135142, AND 140142.
1441          HC       3
              *   ****

1442          KK   C391D
1443          KM   SUBBASIN C391D
1444          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1445          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1446          KM     L =  .34  Kb = .062  Adj. Slope =   15.0
1447          BA    .030
1448          LG    .250    .150   9.700    .060  33.000
1449          UC    .550    .593
1450          UA       0       5      16      30      65      77      84      90      94      97
1451          UA     100
              *   ****

1452          KK   D139W
1453          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT WEST AT CP139.
1454          DR   D139W
              *   ****

1455          KK  139143
1456          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C391C THROUGH SUBBASIN C391D.
1457          KM            1) Reach Length = 180 ft.
1458          KM            2) Assume Local Street Section.
1459          RD
1460          RC    .030    .018    .030    180  0.0030
1461          RX     100     100   107.5   107.5   142.5   142.5     150     150
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1462          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1463          KK    C143
1464          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C391D AND 139143.
1465          HC       2
              *   ****

1466          KK   C391N
1467          KM   SUBBASIN C391N
1468          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1469          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1470          KM     L = 1.38  Kb = .100  Adj. Slope =   14.0
1471          BA    .143
1472          LG    .200    .150   8.400    .110    .000
1473          UC   1.500   2.275
1474          UA       0       5      16      30      65      77      84      90      94      97
1475          UA     100
              *   ****

1476          KK    C144
1477          KM   COMBINE HYDROGRAPHS FROM SUBBASINS C391A TO C391N.
1478          HC       7
              *   ****

1479          KK   DT384
1480          KM   RETREIVE EXCESS RUNOFF HYDROGRAPH FOR FLOWS NOT DIVERTED TO RETENTION FROM
1481          KM   SUBBASIN 384.
1482          KM   THIS HYDROGRAPH WAS GENERATED AS PART OF THE ORIGINAL KAMINSKY HUBBARD MODEL
1483          KM   VOLUME 1.5 SEALED ON 3\14\95 AND STORED IN FILENAME: W100-6.DSS.
1484          BA    2.95
1485          ZR   -=QI  A=SKUNK CREEK  B=DT384  C=FLOW
              *   ****

1486          KK   RM384
1487          KM   RETRIEVE ROUTED HYDROGRAPH FROM SUBBASIN 378.
1488          KM   THIS HYDROGRAPH WAS GENERATED AS PART OF THE ORIGINAL KAMINSKY HUBBARD MODEL
1489          KM   VOLUME 1.5 SEALED ON 3\14\95 AND STORED IN FILENAME: W100-6.DSS.
1490          BA    0.99
1491          ZR    =QI  A=SKUNK CREEK  B=RM384  C=FLOW   F=WEST
              *   ****

1492          KK   D383S
1493          KM   RETRIEVE SOUTH DIVERTED HYDRGRAPH AT CP383.
1494          DR   D383S
              *   ****
```

```
1495          KK  383384
1496          KM   NORMAL DEPTH ROUTE FROM DIVERSION SOUTH AT CP382 TO CP384.
1497          KM            1) Reach Length = 5850 ft.
1498          KM            2) South on 51st Avenue (C.O.G. Arterial Section A-4).
1499          RS       4    FLOW      -1
1500          RC    .030    .020    .030    5850  0.0030
1501          RX     100     100     118     118     212     212     230     230
1502          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****
1                                          HEC-1 INPUT                                                          PAGE 38

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1503          KK    C384
1504          KM   COMBINE KAMINSKY-HUBBARD HYDROGRAPHS DT384 AND RM384 PLUS ROUTED FLOW
1505          KM   FROM SUBBASIN 383 DIVERSION TO THE SOUTH (D383S).
1506          HC       3
              *   ****

1507          KK   C389A
1508          KM   SUBBASIN C389A
1509          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1510          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1511          KM     L =  .90  Kb = .049  Adj. Slope =   14.0
1512          BA    .292
1513          LG    .240    .150   8.800    .070  32.000
1514          UC    .858    .579
1515          UA       0       5      16      30      65      77      84      90      94      97
1516          UA     100
              *   ****

1517          KK  DC389A
1518          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
1519          KM   DIVERT 80% OF THE 100-YR, 2-HR RETENTION VOLUME.
1520          KM   REQUIRED VOLUME = 2.99 AC.-FT.
1521          DT  C389AR    2.65
1522          DI       0   10000
1523          DQ       0   10000
              *   ****

1524          KK   D124S
1525          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP124.
1526          DR   D124S
              *   ****

1527          KK  124145
1528          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C388C THROUGH SUBBASIN C389A.
1529          KM            1) Reach Length = 4050 ft.
1530          KM            2) Assume Standard Single Family Residential Collector Street
1531          KM               (C.O.G. Collector Section C-2).
1532          RD
1533          RC    .030    .020    .030    4050  0.0030
1534          RX     100     100   110.5   110.5   149.5   149.5     160     160
1535          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1536          KK    C145
1537          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C389A AND 124145.
1538          HC       2
              *   ****

1539          KK   C389D
1540          KM   SUBBASIN C389D
1541          KM   HYDROGRAPH TO ACDC AS CP146.
1542          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1543          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1544          KM     L =  .26  Kb = .063  Adj. Slope =   15.0
1                                          HEC-1 INPUT                                                          PAGE 39

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1545          BA    .029
1546          LG    .250    .150   8.400    .090  30.000
1547          UC    .483    .423
1548          UA       0       5      16      30      65      77      84      90      94      97
1549          UA     100
              *   ****

1550          KK   C389B
1551          KM   SUBBASIN C389B
```

```
1552          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1553          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1554          KM     L =  .75  Kb = .047  Adj. Slope =   16.0
1555          BA    .127
1556          LG    .220    .150   8.400    .090  42.000
1557          UC    .712    .654
1558          UA       0       5      16      30      65      77      84      90      94      97
1559          UA     100
              *   ****

1560          KK  DC389B
1561          KM   DIVERT 100% OF THE 10-YR, 2-HR RETENTION VOLUME.
1562          KM   REQUIRED VOLUME = 3.85 AC.-FT.
1563          DT  C389BR    3.85
1564          DI       0   10000
1565          DQ       0   10000
              *   ****

1566          KK   D125S
1567          KM   RETRIEVE HYDROGRAPH FROM FLOW SPLIT SOUTH AT CP125.
1568          DR   D125S
              *   ****

1569          KK  125147
1570          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUBBASIN C388D THROUGH SUBBASIN C389B.
1571          KM            1) Reach Length = 2650 ft.
1572          KM            2) Assume Standard Commerical/Industrial Collector Street
1573          KM               (C.O.G. Collector Section C-4).
1574          RD
1575          RC    .030    .020    .030    2650  0.0030
1576          RX     100     100   111.5   111.5   158.5   158.5     170     170
1577          RY     3.5       1    0.25       0       0    0.25       1     3.5
              *   ****

1578          KK    C147
1579          KM   COMBINE HYDROGRAPHS FROM SUBBASIN C389B AND 125147.
1580          HC       2
              *   ****

1581          KK   C389E
1582          KM   SUBBASIN C389E
1583          KM   HYDROGRAPH TO ACDC AS CP149.
1584          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1585          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1586          KM     L =  .25  Kb = .056  Adj. Slope =   16.0
1587          BA    .049
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1588          LG    .230    .150   7.600    .120  42.000
1589          UC    .433    .269
1590          UA       0       5      16      30      65      77      84      90      94      97
1591          UA     100
              *   ****

1592          KK   C389F
1593          KM   SUBBASIN C389F
1594          KM   6-HOUR RAINFALL, PATTERN NO. 3.13 WAS USED TO FIND TC & R FOR THIS BASIN
1595          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF  .910
1596          KM     L = 1.19  Kb = .104  Adj. Slope =   15.0
1597          BA    .108
1598          LG    .200    .150   8.000    .130    .000
1599          UC   1.500   2.372
1600          UA       0       5      16      30      65      77      84      90      94      97
1601          UA     100
              *   ****

1602          KK    C149
1603          KM   COMBINE HYDROGRAPHS FROM SUBBASINS C389A TO C389F.
1604          HC       6
              *   ****

1605          KK    C150
1606          KM   COMBINE HYDROGRAPHS FROM INTRM1, CP144, AND CP149.
1607          KM   TOTAL PEAK FLOW FROM THE GLENDALE/PEORIA ADMP UPDATE.
1608          HC       3
1609          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   16        R381
                V
                V
   27      381101
                .
                .
   35           .       C386A
                .           .
                .           .
   54           .           .-------> C386AR
   51           .      DC386A
                .           .
                .           .
   57        C101............
                .
                .
   64           .------->   D101S
   60       D101W
                V
                V
   67      101102
                .
                .
   75           .       C386B
                .           .
                .           .
   88           .           .-------> C386BR
   85           .      DC386B
                .           .
                .           .
   91        C102............
                .
                .
   98           .------->   D102S
   94       D102W
                V
                V
  101      102103
                .
                .
  109           .       C401A
                .           .
                .           .
  122           .           .-------> C401AR
  119           .      DC401A
                .           .
                .           .
  125        C103............
                .
                .
  131           .------->   D103S
  128       D103W
                V
                V
  134      103104
                .
                .
  142           .       C401B
                .           .
                .           .
  155           .           .-------> C401BR
  152           .      DC401B
                .           .
                .           .
  158        C104............
                .
                .
  165           .------->   D104W
  161       D104S
                V
                V
  168      104105
                .
                .
```

```
176          .       C390B
             .           .
             .           .
189          .           .-------> C390BR
186          .      DC390B
             .           .
             .           .
2        C105............
             .
             .
201          .------->   D105W
195      D105S
             V
             V
204     105112
             .
             .
214          .           .<-------   D101S
212          .       D101S
             .           V
             .           V
215          .      101106
             .           .
             .           .
226          .           .           .<-------   D102S
224          .           .       D102S
             .           .           V
             .           .           V
227          .           .      102106
             .           .           .
             .           .           .
235          .           .           .       C387A
             .           .           .           .
             .           .           .           .
248          .           .           .           .-------> C387AR
245          .           .           .      DC387A
             .           .           .           .
             .           .           .           .
251          .        C106........................
             .           .
             .           .
260          .           .------->   D106S
254          .       D106W
             .           V
             .           V
263          .      106107
             .           .
             .           .
274          .           .           .<-------   D103S
272          .           .       D103S
             .           .           V
             .           .           V
275          .           .      103107
             .           .           .
             .           .           .
284          .           .           .       C390A
             .           .           .           .
             .           .           .           .
297          .           .           .           .-------> C390AR
294          .           .           .      DC390A
             .           .           .           .
             .           .           .           .
300          .        C107........................
             .           .
             .           .
306          .           .------->   D107S
303          .       D107W
             .           V
             .           V
309          .      107112
             .           .
             .           .
318          .           .        R382
             .           .           .
             .           .           .
334          .           .           .------->   D382S
327          .           .       D382W
             .           .           V
             .           .           V
             .           .      382108
             .           .           .
```

```
348                 C387B
                      .
                      .
361                   .-------> C387BR
358               DC387B
                      .
                      .
4            C108............
                      .
                      .
370                   .-------> D108S
367           D108W
                  V
                  V
373          108109
                      .
                      .
383                   .<-------  D106S
381               D106S
                      V
                      V
384              106109
                      .
                      .
392                   .       C387C
                      .           .
                      .           .
405                   .           .-------> C387CR
402                   .      DC387C
                      .           .
                      .           .
408            C109.......................
                      .
                      .
415                   .-------> D109S
411           D109W
                  V
                  V
418          109110
                      .
                      .
426               C390C
                      .
                      .
439                   .-------> C390CR
436              DC390C
                      .
                      .
442            C110............
                      .
                      .
448                   .-------> D110S
445           D110W
                  V
                  V
451          110111
                      .
                      .
461                   .<-------  D107S
459               D107S
                      V
                      V
462              107111
                      .
                      .
471                   .       C390D
                      .           .
                      .           .
481            C111.......................
                      .
                      .
487                   .-------> D111S
484           D111W
                  V
                  V
490          111112
                      .
                      .
                  C390E
                      .
```

```
511                                                  .-------> C390ER
508                                          DC390E
514                                 C112E............
7                            C112............
524                                 .-------> D112W
520                          D112S
                                V
                                V
527                         112113
535                                 C406D
545                          C113............
551                                          .<-------  D105W
549                                 D105W
                                        V
                                        V
552                                105114
561                                          C406A
575                                                  .-------> C406AR
571                                          DC406A
578                                  C114............
584                                          .-------> D114W
581                                 D114S
                                        V
                                        V
587                                114115
596                                          C406B
606                                  C115............
613                                          .-------> D115W
609                                 D115S
                                        V
                                        V
616                                115116
627                                                  .<-------  D112W
625                                          D112W
                                                V
                                                V
628                                         112116
638                                                      C406C
651                                                          .-------> C406R
648                                                      DC406C
654                                 C116........................
662                                          .-------> D116W
                                    D116S
```

```
667                                  .<-------   D114W
665                            D114W
                                   V
                                   V
668                           114117
                                   .
                                   .
                                   .       C406E
                                   .           .
                                   .           .
690                                .           .------->  C406ER
687                                .      DC406E
                                   .           .
                                   .           .
693                            C117............
                                   .
                                   .
699                                .------->   D117W
696                            D117S
                                   V
                                   V
702                           117118
                                   .
                                   .
713                                .           .<-------   D115W
711                                .       D115W
                                   .           V
                                   .           V
714                                .      115118
                                   .           .
                                   .           .
725                                .           .           .<-------   D116W
723                                .           .       D116W
                                   .           .           V
                                   .           .           V
726                                .           .      116118
                                   .           .           .
                                   .           .           .
734                                .           .           .       C406F
                                   .           .           .           .
                                   .           .           .           .
744                            C118.................................
                                   .
                                   .
750                                .           .<-------   D117W
748                                .       D117W
                                   .           V
                                   .           V
751                                .      117119
                                   .           .
                                   .           .
760                                .           .       C406G
                                   .           .           .
                                   .           .           .
773                                .           .           .------->  C406GR
770                                .           .      DC406G
                                   .           .           .
                                   .           .           .
776                                .       C119............
                                   .           .
                                   .           .
780                                .           .       C406H
                                   .           .           .
                                   .           .           .
790                        INTRM1..............................................
                                   .
                                   .
796                                .<-------   D382S
794                                .      D382S
                                   .          V
                                   .          V
797                                .     382120
                                   .          .
                                   .          .
811                                .------->   D120S
805                                .      D120W
                                   .          V
                                   .          V
                                   .     120121
                                   .          .
```

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826                                  .<-------   D108S
824                             D108S
                                    V
                                    V
827                            108121
                                    .
                                    .
                                    .       C388A
                                    .           .
                                    .           .
846                        C121.......................
                                    .
                                    .
852                                 .------->   D121S
849                        D121W
                                V
                                V
855                        121123
                                    .
                                    .
866                                 .<-------   D109S
864                             D109S
                                    V
                                    V
867                            109122
                                    .
                                    .
879                                 .------->   D122W
875                             D122S
                                    V
                                    V
882                            122123
                                    .
                                    .
890                                 .       C388B
                                    .           .
                                    .           .
904                                 .           .------->  C388BR
900                                 .      DC388B
                                    .           .
                                    .           .
907                        C123.......................
                                    .
                                    .
914                                 .------->   D123W
910                        D123S
                                V
                                V
917                        123126
                                    .
                                    .
925                            DT383
                                    .
                                    .
931                                 .       RM383
                                    .           .
                                    .           .
939                                 .           .           .<-------   D120S
937                                 .           .       D120S
                                    .           .           V
                                    .           .           V
940                                 .           .      120383
                                    .           .           .
                                    .           .           .
948                            C383.......................
                                    .
                                    .
961                                 .------->   D383S
953                            D383W
                                    V
                                    V
964                           383124
                                    .
                                    .
972                                 .       C388C
                                    .           .
                                    .           .
985                                 .           .------->  C388CR
                                    .      DC388C
                                    .           .
```

```
988                 C124............
995                 .------->   D124S
991              D124W
                     V
                     V
                124125
1008                .<-------   D121S
1006                      D121S
                              V
                              V
1009                     121125
1018                                C388D
1031                                        .------->  C388DR
1028                               DC388D
1034                C125......................
1041                .------->   D125S
1037              D125W
                     V
                     V
1044            125126
1052                      C388E
1066                                .------->  C388ER
1062                     DC388E
1069          C126......................
1076          .------->   D126W
1072        D126S
                V
                V
1079       126127
1087             C389C
1100                      .------->  C389CR
1097            DC389C
1103          C127............
1106             C391M
1116          C128............
1119             C391L
1132                      .------->  C391LR
1129            DC391L
1137                                .<-------   D126W
1135                      D126W
                              V
                              V
                         126129
```

```
1147                C129............
                    .
1150                .          C391I
                    .           .
                    .           .
                    .           .<-------   D123W
                    .           .      D123W
                    .           .          V
                    .           .          V
1163                .           .     123132
                    .           .          .
                    .           .          .
1171                .        C132...........
                    .           .
                    .           .
1178                .           .-------->   D132S
1174                .       D132W
                    .           V
                    .           V
1181                .      132133
                    .           .
                    .           .
1190                .           .      C391J
                    .           .          .
                    .           .          .
1200                .        C133...........
                    .           .
                    .           .
1205                .           .           .<-------   D132S
1203                .           .      D132S
                    .           .          .
                    .           .          .
1206                .           .           .       C391K
                    .           .           .           .
                    .           .           .           .
1216                .           .       C130...........
                    .           .           .
                    .           .           .
1220                .           .           .       C391E
                    .           .           .           .
                    .           .           .           .
                INTRM2.............................................
                    .
                    .
1234                .      C391A
                    .          .
                    .          .
1247                .          .-------->  C391AR
1244                .     DC391A
                    .          .
                    .          .
1252                .          .           .<-------   D110S
1250                .          .      D110S
                    .          .          V
                    .          .          V
1253                .          .     110136
                    .          .           .
                    .          .           .
1264                .          .           .<-------   D122W
1262                .          .           .      D122W
                    .          .           .          V
                    .          .           .          V
1265                .          .           .     122136
                    .          .           .          .
                    .          .           .          .
1274                .          .           .           .       C391B
                    .          .           .           .           .
                    .          .           .           .           .
1287                .          .           .           .           .-------->   D135W
1284                .          .           .           .       D135S
                    .          .           .           .           V
                    .          .           .           .           V
1290                .          .           .           .      135136
                    .          .           .           .           .
                    .          .           .           .           .
1299                .      C136...................................
                    .          .
                    .          .
1306                .          .-------->   D136W
```

```
1302                    .         .         .      D136S
                        .         .         .          V
                        .         .         .          V
1309                    .         .         .     136137
                        .         .         .          .
                        .         .         .          .
1317                    .         .         .          .      C391F
                        .         .         .          .          .
                        .         .         .          .          .
1327                    .         .         .       C137............
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1330                    .         .         .          .      C391G
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1342                    .         .         .          .          .          .<-------   D136W
1340                    .         .         .          .          .      D136W
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1343                    .         .         .          .          .     136138
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1352                    .         .         .          .       C138............
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1355                    .         .         .          .          .      C391C
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1367                    .         .         .          .          .          .          .<-------   D111S
1365                    .         .         .          .          .          .      D111S
                        .         .         .          .          .          .          V
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1368                    .         .         .          .          .          .     111139
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1379                    .         .         .          .          .          .          .-------->   D139W
1376                    .         .         .          .          .          .      D139S
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1382                    .         .         .          .          .          .     139140
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1393                    .         .         .          .          .          .          .-------->   D140S
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1396                    .         .         .          .          .          .     140141
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1404                    .         .         .          .          .      C141............
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1407                    .         .         .          .          .          .      C391H
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1419                    .         .         .          .          .          .          .          .<-------   D135W
1417                    .         .         .          .          .          .          .      D135W
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1420                    .         .         .          .          .          .          .     135142
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1430                    .         .         .          .          .          .          .          .
.<-------   D140S
1428                    .         .         .          .          .          .          .          .      D140S
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1431                    .         .         .          .          .          .          .          .     140142
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1439                    .         .         .          .          .          .      C142.......................
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1442                    .         .         .          .          .          .          .      C391D
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1454                    .         .         .          .          .          .          .          .
.<-------   D139W
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1455                                                                                  139143
1463                                                                          C143............
1466                                                                                  C391N
1476                  C144.......................................................................
1479                                DT384
1486                                          RM384
1494                                                                  .<-------   D383S
1492                                                            D383S
                                                                    V
                                                                    V
1495                                                          383384
                                                                    .
1503                                C384......................
1507                                          C389A
1521                                                      .------->  C389AR
1517                                        DC389A
1526                                                                  .<-------   D124S
1524                                                            D124S
                                                                    V
                                                                    V
1527                                                          124145
                                                                    .
1536                                          C145............
1539                                                          C389D
                                                                    .
1550                                                                      C389B
                                                                            .
1563                                                                        .------->  C389BR
1560                                                                      DC389B
                                                                            .
1568                                                                            .<-------   D125S
1566                                                                        D125S
                                                                              V
                                                                              V
1569                                                                        125147
                                                                              .
1578                                                                      C147............
1581                                                                        C389E
                                                                              .
1592                                                                              .       C389F
                                                                                      .
1602                                C149.......................................................
1605                  C150......................
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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	R381	656.	4.45	129.	32.	31.	1.61		
+	ROUTED TO	381101	655.	4.55	130.	32.	31.	1.61		
+	HYDROGRAPH AT	C386A	323.	4.55	90.	23.	22.	0.53		
+	DIVERSION TO	C386AR	317.	4.55	34.	9.	8.	0.53		
+	HYDROGRAPH AT	DC386A	323.	4.55	58.	14.	14.	0.53		
+	2 COMBINED AT	C101	978.	4.55	187.	47.	45.	2.14		
+	DIVERSION TO	D101S	130.	4.55	21.	5.	5.	2.14		
+	HYDROGRAPH AT	D101W	848.	4.55	166.	41.	40.	2.14		
+	ROUTED TO	101102	831.	4.70	166.	41.	40.	2.14		
+									1.50	4.70
+	HYDROGRAPH AT	C386B	322.	4.60	102.	26.	25.	0.54		
+	DIVERSION TO	C386BR	255.	4.60	26.	6.	6.	0.54		
	HYDROGRAPH AT	DC386B	322.	4.60	79.	20.	19.	0.54		
+	2 COMBINED AT	C102	1150.	4.70	245.	61.	59.	2.68		
+	DIVERSION TO	D102S	607.	4.70	141.	35.	34.	2.68		
+	HYDROGRAPH AT	D102W	543.	4.70	104.	26.	25.	2.68		
+	ROUTED TO	102103	537.	4.85	104.	26.	25.	2.68		
+	HYDROGRAPH AT	C401A	102.	4.40	26.	7.	6.	0.14		
+	DIVERSION TO	C401AR	84.	4.40	8.	2.	2.	0.14		
+	HYDROGRAPH AT	DC401A	102.	4.40	19.	5.	5.	0.14		
+	2 COMBINED AT	C103	609.	4.85	123.	31.	30.	2.82		
+	DIVERSION TO	D103S	69.	4.85	15.	4.	4.	2.82		
+	HYDROGRAPH AT	D103W	540.	4.85	108.	27.	26.	2.82		
+	ROUTED TO	103104	534.	5.00	108.	27.	26.	2.82		
+	HYDROGRAPH AT	C401B	69.	4.35	18.	5.	4.	0.10		
	DIVERSION TO	C401BR	30.	4.35	4.	1.	1.	0.10		
	HYDROGRAPH AT									

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+		DC401B	69.	4.35	15.	4.	3.	0.10		
	2 COMBINED AT	C104	570.	5.00	123.	31.	30.	2.92		
+	DIVERSION TO	D104W	264.	5.00	48.	12.	12.	2.92		
+	HYDROGRAPH AT	D104S	306.	5.00	75.	19.	18.	2.92		
+	ROUTED TO	104105	301.	5.10	75.	19.	18.	2.92		
+									0.84	5.10
+	HYDROGRAPH AT	C390B	168.	4.30	41.	10.	10.	0.20		
+	DIVERSION TO	C390BR	88.	4.30	8.	2.	2.	0.20		
+	HYDROGRAPH AT	DC390B	168.	4.30	33.	8.	8.	0.20		
+	2 COMBINED AT	C105	376.	5.05	108.	27.	26.	3.12		
+	DIVERSION TO	D105W	106.	5.05	14.	3.	3.	3.12		
+	HYDROGRAPH AT	D105S	270.	5.05	94.	23.	23.	3.12		
+	ROUTED TO	105112	269.	5.20	94.	24.	23.	3.12		
+	HYDROGRAPH AT	D101S	130.	4.55	21.	5.	5.	0.00		
+	ROUTED TO	101106	122.	4.90	21.	5.	5.	0.00		
+									0.75	4.90
	HYDROGRAPH AT	D102S	607.	4.70	141.	35.	34.	0.00		
+	ROUTED TO	102106	596.	4.80	141.	35.	34.	0.00		
+									1.45	4.80
+	HYDROGRAPH AT	C387A	293.	4.35	78.	20.	19.	0.35		
+	DIVERSION TO	C387AR	293.	4.45	38.	9.	9.	0.35		
+	HYDROGRAPH AT	DC387A	288.	4.45	41.	10.	10.	0.35		
+	3 COMBINED AT	C106	927.	4.80	204.	51.	49.	0.35		
+	DIVERSION TO	D106S	496.	4.80	122.	30.	29.	0.35		
+	HYDROGRAPH AT	D106W	432.	4.80	82.	21.	20.	0.35		
+	ROUTED TO	106107	428.	4.95	83.	21.	20.	0.35		
+	HYDROGRAPH AT	D103S	69.	4.85	15.	4.	4.	0.00		
+	ROUTED TO	103107	68.	5.10	15.	4.	4.	0.00		
+	HYDROGRAPH AT	C390A	221.	4.50	62.	16.	15.	0.30		
+	DIVERSION TO	C390AR	9.	4.50	3.	1.	1.	0.30		
	HYDROGRAPH AT	DC390A	221.	4.50	60.	15.	14.	0.30		

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	3 COMBINED AT	C107	659.	4.95	158.	39.	38.	0.65		
	DIVERSION TO	D107S	334.	4.95	80.	20.	19.	0.65		
+	HYDROGRAPH AT	D107W	324.	4.95	77.	19.	19.	0.65		
+	ROUTED TO	107112	321.	5.05	77.	19.	19.	0.65		
+	HYDROGRAPH AT	R382	2427.	4.60	526.	135.	130.	0.00		
+	DIVERSION TO	D382S	1310.	4.60	325.	84.	81.	0.00		
+	HYDROGRAPH AT	D382W	1117.	4.60	202.	50.	48.	0.00		
+	ROUTED TO	382108	1112.	4.65	202.	50.	49.	0.00		
+	HYDROGRAPH AT	C387B	136.	4.65	41.	10.	10.	0.34		
+	DIVERSION TO	C387BR	4.	4.65	0.	0.	0.	0.34		
+	HYDROGRAPH AT	DC387B	136.	4.65	41.	10.	10.	0.34		
+	2 COMBINED AT	C108	1249.	4.65	242.	61.	58.	0.34		
+	DIVERSION TO	D108S	198.	4.65	35.	9.	8.	0.34		
+	HYDROGRAPH AT	D108W	1051.	4.65	207.	52.	50.	0.34		
	ROUTED TO	108109	1044.	4.75	207.	52.	50.	0.34	1.94	4.75
+	HYDROGRAPH AT	D106S	496.	4.80	122.	30.	29.	0.00		
+	ROUTED TO	106109	487.	4.95	122.	30.	29.	0.00	1.22	4.95
+	HYDROGRAPH AT	C387C	171.	4.50	49.	12.	12.	0.25		
+	DIVERSION TO	C387CR	8.	4.50	3.	1.	1.	0.25		
+	HYDROGRAPH AT	DC387C	171.	4.50	47.	12.	11.	0.25		
+	3 COMBINED AT	C109	1638.	4.80	375.	94.	91.	0.59		
+	DIVERSION TO	D109S	985.	4.80	272.	68.	66.	0.59		
+	HYDROGRAPH AT	D109W	653.	4.80	103.	26.	25.	0.59		
+	ROUTED TO	109110	644.	4.85	103.	26.	25.	0.59	1.56	4.85
+	HYDROGRAPH AT	C390C	66.	4.45	19.	5.	5.	0.09		
+	DIVERSION TO	C390CR	15.	4.45	2.	1.	1.	0.09		
+	HYDROGRAPH AT	DC390C	66.	4.45	17.	4.	4.	0.09		
	2 COMBINED AT	C110	697.	4.85	120.	30.	29.	0.68		

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	DIVERSION TO	D110S	125.	4.85	23.	6.	6.	0.68		
	HYDROGRAPH AT	D110W	572.	4.85	97.	24.	23.	0.68		
+	ROUTED TO	110111	569.	4.90	97.	24.	23.	0.68		
+	HYDROGRAPH AT	D107S	334.	4.95	80.	20.	19.	0.00		
+	ROUTED TO	107111	331.	5.05	80.	20.	19.	0.00		
+	HYDROGRAPH AT	C390D	46.	4.45	12.	3.	3.	0.07		
+	3 COMBINED AT	C111	918.	5.00	190.	47.	46.	0.76		
+	DIVERSION TO	D111S	170.	5.00	37.	9.	9.	0.76		
+	HYDROGRAPH AT	D111W	749.	5.00	153.	38.	37.	0.76		
+	ROUTED TO	111112	745.	5.05	153.	38.	37.	0.76		
+	HYDROGRAPH AT	C390E	164.	4.50	46.	12.	11.	0.23		
+	DIVERSION TO	C390ER	3.	4.50	0.	0.	0.	0.23		
+	HYDROGRAPH AT	DC390E	164.	4.50	46.	12.	11.	0.23		
+	2 COMBINED AT	C112E	860.	5.05	198.	50.	48.	0.99		
	2 COMBINED AT	C112	1181.	5.05	276.	69.	67.	1.63		
+	DIVERSION TO	D112W	388.	5.05	49.	12.	12.	1.63		
+	HYDROGRAPH AT	D112S	792.	5.05	227.	57.	55.	1.63		
+	ROUTED TO	112113	791.	5.05	227.	57.	55.	1.63		
+									1.46	5.05
+	HYDROGRAPH AT	C406D	37.	4.00	5.	1.	1.	0.03		
+	2 COMBINED AT	C113	794.	5.05	232.	58.	56.	1.67		
+	HYDROGRAPH AT	D105W	106.	5.05	14.	3.	3.	0.00		
+	ROUTED TO	105114	103.	5.15	14.	3.	3.	0.00		
+									0.68	5.15
+	HYDROGRAPH AT	C406A	65.	4.35	16.	4.	4.	0.10		
+	DIVERSION TO	C406AR	65.	4.50	8.	2.	2.	0.10		
+	HYDROGRAPH AT	DC406A	63.	4.50	8.	2.	2.	0.10		
+	2 COMBINED AT	C114	131.	5.15	22.	6.	5.	0.10		
+	DIVERSION TO	D114W	61.	5.15	9.	2.	2.	0.10		
	HYDROGRAPH AT	D114S	71.	5.15	13.	3.	3.	0.10		

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	ROUTED TO	114115	68.	5.25	13.	3.	3.	0.10		
+									0.59	5.25
	HYDROGRAPH AT	C406B	48.	4.50	15.	4.	4.	0.07		
+	2 COMBINED AT	C115	99.	5.20	28.	7.	7.	0.17		
+	DIVERSION TO	D115W	49.	5.20	14.	3.	3.	0.17		
+	HYDROGRAPH AT	D115S	49.	5.20	14.	3.	3.	0.17		
+	ROUTED TO	115116	49.	5.30	14.	3.	3.	0.17		
+	HYDROGRAPH AT	D112W	388.	5.05	49.	12.	12.	0.00		
+	ROUTED TO	112116	388.	5.10	49.	12.	12.	0.00		
+	HYDROGRAPH AT	C406C	43.	4.60	14.	4.	4.	0.07		
+	DIVERSION TO	C406R	5.	4.60	1.	0.	0.	0.07		
+	HYDROGRAPH AT	DC406C	43.	4.60	14.	3.	3.	0.07		
+	3 COMBINED AT	C116	465.	5.10	76.	19.	18.	0.24		
+	DIVERSION TO	D116W	145.	5.10	22.	6.	5.	0.24		
+	HYDROGRAPH AT	D116S	319.	5.10	55.	14.	13.	0.24		
	HYDROGRAPH AT	D114W	61.	5.15	9.	2.	2.	0.00		
+	ROUTED TO	114117	60.	5.25	9.	2.	2.	0.00		
+	HYDROGRAPH AT	C406E	23.	4.55	7.	2.	2.	0.05		
+	DIVERSION TO	C406ER	23.	4.80	4.	1.	1.	0.05		
+	HYDROGRAPH AT	DC406E	21.	4.80	4.	1.	1.	0.05		
+	2 COMBINED AT	C117	76.	5.20	13.	3.	3.	0.05		
+	DIVERSION TO	D117W	23.	5.20	4.	1.	1.	0.05		
+	HYDROGRAPH AT	D117S	53.	5.20	9.	2.	2.	0.05		
+	ROUTED TO	117118	53.	5.30	9.	2.	2.	0.05		
+	HYDROGRAPH AT	D115W	49.	5.20	14.	3.	3.	0.00		
+	ROUTED TO	115118	49.	5.30	14.	3.	3.	0.00		
+	HYDROGRAPH AT	D116W	145.	5.10	22.	6.	5.	0.00		
+	ROUTED TO	116118	142.	5.15	22.	6.	5.	0.00		
+									0.83	5.15
	HYDROGRAPH AT	C406F	57.	4.50	16.	4.	4.	0.10		

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	4 COMBINED AT	C118	265.	5.25	60.	15.	15.	0.16		
	HYDROGRAPH AT	D117W	23.	5.20	4.	1.	1.	0.00		
+	ROUTED TO	117119	22.	5.40	4.	1.	1.	0.00		
+	HYDROGRAPH AT	C406G	34.	4.65	12.	3.	3.	0.11		
+	DIVERSION TO	C406GR	34.	4.75	4.	1.	1.	0.11		
+	HYDROGRAPH AT	DC406G	34.	4.75	9.	2.	2.	0.11		
+	2 COMBINED AT	C119	52.	5.00	13.	3.	3.	0.11		
+	HYDROGRAPH AT	C406H	58.	4.90	22.	6.	5.	0.27		
+	5 COMBINED AT	INTRM1	1463.	5.10	380.	96.	93.	2.44		
+	HYDROGRAPH AT	D382S	1310.	4.60	325.	84.	81.	0.00		
+	ROUTED TO	382120	1292.	4.65	324.	84.	81.	0.00		
+									1.93	4.65
+	DIVERSION TO	D120S	660.	4.65	208.	55.	53.	0.00		
+	HYDROGRAPH AT	D120W	631.	4.65	116.	29.	28.	0.00		
+	ROUTED TO	120121	624.	4.75	116.	29.	28.	0.00		
+									1.87	4.75
	HYDROGRAPH AT	D108S	198.	4.65	35.	9.	8.	0.00		
+	ROUTED TO	108121	194.	4.80	35.	9.	8.	0.00		
+									0.97	4.80
+	HYDROGRAPH AT	C388A	135.	4.55	39.	10.	10.	0.26		
+	3 COMBINED AT	C121	943.	4.75	190.	48.	46.	0.26		
+	DIVERSION TO	D121S	471.	4.75	91.	23.	22.	0.26		
+	HYDROGRAPH AT	D121W	472.	4.75	99.	25.	24.	0.26		
+	ROUTED TO	121123	470.	4.90	99.	25.	24.	0.26		
+	HYDROGRAPH AT	D109S	985.	4.80	272.	68.	66.	0.00		
+	ROUTED TO	109122	982.	4.85	272.	68.	66.	0.00		
+	DIVERSION TO	D122W	74.	4.85	11.	3.	3.	0.00		
+	HYDROGRAPH AT	D122S	908.	4.85	260.	66.	63.	0.00		
+	ROUTED TO	122123	907.	4.95	260.	66.	63.	0.00		
+	HYDROGRAPH AT	C388B	244.	4.35	53.	13.	13.	0.34		
	DIVERSION TO	C388BR	243.	4.40	23.	6.	5.	0.34		

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	DC388B	243.	4.40	31.	8.	8.	0.34		
	3 COMBINED AT	C123	1511.	4.90	389.	98.	95.	0.60		
+	DIVERSION TO	D123W	216.	4.90	37.	9.	9.	0.60		
+	HYDROGRAPH AT	D123S	1295.	4.90	352.	89.	86.	0.60		
+	ROUTED TO	123126	1293.	4.95	352.	89.	86.	0.60		
+	HYDROGRAPH AT	DT383	817.	4.30	141.	35.	34.	0.99		
+	HYDROGRAPH AT	RM383	1285.	4.75	266.	66.	64.	1.98		
+	HYDROGRAPH AT	D120S	660.	4.65	208.	55.	53.	0.00		
+	ROUTED TO	120383	658.	4.75	208.	55.	53.	0.00		
+	3 COMBINED AT	C383	2540.	4.60	614.	157.	151.	2.97		
+	DIVERSION TO	D383S	1367.	4.60	370.	96.	92.	2.97		
+	HYDROGRAPH AT	D383W	1174.	4.60	244.	61.	59.	2.97		
+	ROUTED TO	383124	1173.	4.65	244.	61.	59.	2.97		
+	HYDROGRAPH AT	C388C	43.	4.30	11.	3.	3.	0.05		
	DIVERSION TO	C388CR	21.	4.30	2.	1.	1.	0.05		
+	HYDROGRAPH AT	DC388C	43.	4.30	9.	2.	2.	0.05		
+	2 COMBINED AT	C124	1208.	4.65	253.	63.	61.	3.02		
+	DIVERSION TO	D124S	150.	4.65	44.	11.	11.	3.02		
+	HYDROGRAPH AT	D124W	1059.	4.65	210.	52.	50.	3.02		
+	ROUTED TO	124125	1057.	4.70	210.	52.	50.	3.02		
+	HYDROGRAPH AT	D121S	471.	4.75	91.	23.	22.	0.00		
+	ROUTED TO	121125	470.	4.85	91.	23.	22.	0.00		
+	HYDROGRAPH AT	C388D	109.	4.55	33.	9.	8.	0.19		
+	DIVERSION TO	C388DR	30.	4.55	4.	1.	1.	0.19		
+	HYDROGRAPH AT	DC388D	109.	4.55	30.	8.	7.	0.19		
+	3 COMBINED AT	C125	1613.	4.75	331.	83.	80.	3.21		
+	DIVERSION TO	D125S	203.	4.75	34.	9.	8.	3.21		
+	HYDROGRAPH AT	D125W	1410.	4.75	296.	74.	71.	3.21		
	ROUTED TO	125126	1407.	4.85	297.	74.	71.	3.21		

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	C388E	75.	4.55	23.	6.	6.	0.15		
	DIVERSION TO	C388ER	67.	4.55	7.	2.	2.	0.15		
+	HYDROGRAPH AT	DC388E	75.	4.55	17.	4.	4.	0.15		
+	3 COMBINED AT	C126	2750.	4.90	666.	168.	161.	3.96		
+	DIVERSION TO	D126W	1664.	4.90	477.	121.	116.	3.96		
+	HYDROGRAPH AT	D126S	1086.	4.90	188.	47.	45.	3.96		
+	ROUTED TO	126127	1084.	4.90	188.	47.	45.	3.96		
+	HYDROGRAPH AT	C389C	56.	4.30	16.	4.	4.	0.07		
+	DIVERSION TO	C389CR	56.	4.55	9.	2.	2.	0.07		
+	HYDROGRAPH AT	DC389C	50.	4.55	7.	2.	2.	0.07		
+	2 COMBINED AT	C127	1117.	4.90	195.	49.	47.	4.03		
+	HYDROGRAPH AT	C391M	16.	4.00	3.	1.	1.	0.01		
+	2 COMBINED AT	C128	1120.	4.90	198.	50.	48.	4.05		
+	HYDROGRAPH AT	C391L	18.	4.05	4.	1.	1.	0.02		
	DIVERSION TO	C391LR	18.	4.15	2.	1.	1.	0.02		
+	HYDROGRAPH AT	DC391L	17.	4.15	2.	0.	0.	0.02		
+	HYDROGRAPH AT	D126W	1664.	4.90	477.	121.	116.	0.00		
+	ROUTED TO	126129	1663.	4.90	477.	121.	116.	0.00		
+	2 COMBINED AT	C129	1667.	4.90	479.	121.	116.	0.02		
+	HYDROGRAPH AT	C391I	37.	4.45	10.	3.	2.	0.06		
+	HYDROGRAPH AT	D123W	216.	4.90	37.	9.	9.	0.00		
+	ROUTED TO	123132	215.	4.95	37.	9.	9.	0.00		
+	2 COMBINED AT	C132	241.	4.95	47.	12.	11.	0.06		
+	DIVERSION TO	D132S	125.	4.95	25.	6.	6.	0.06		
+	HYDROGRAPH AT	D132W	116.	4.95	22.	6.	5.	0.06		
+	ROUTED TO	132133	116.	4.95	22.	6.	5.	0.06		
+	HYDROGRAPH AT	C391J	6.	4.30	2.	0.	0.	0.01		
+	2 COMBINED AT	C133	119.	4.95	24.	6.	6.	0.07		
	HYDROGRAPH AT	D132S	125.	4.95	25.	6.	6.	0.00		

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	C391K	14.	4.40	4.	1.	1.	0.03		
	2 COMBINED AT	C130	134.	4.95	28.	7.	7.	0.03		
+	HYDROGRAPH AT	C391E	61.	4.45	17.	4.	4.	0.09		
+	5 COMBINED AT	INTRM2	3085.	4.90	744.	188.	181.	4.24		
+	HYDROGRAPH AT	C391A	75.	4.50	23.	6.	6.	0.11		
+	DIVERSION TO	C391AR	51.	4.50	5.	1.	1.	0.11		
+	HYDROGRAPH AT	DC391A	75.	4.50	18.	5.	4.	0.11		
+	HYDROGRAPH AT	D110S	125.	4.85	23.	6.	6.	0.00		
+	ROUTED TO	110136	125.	5.00	23.	6.	6.	0.00		
+	HYDROGRAPH AT	D122W	74.	4.85	11.	3.	3.	0.00		
+	ROUTED TO	122136	72.	5.05	11.	3.	3.	0.00		
+									0.55	5.05
+	HYDROGRAPH AT	C391B	38.	4.45	10.	3.	3.	0.06		
+	DIVERSION TO	D135W	14.	4.45	3.	1.	1.	0.06		
+	HYDROGRAPH AT	D135S	24.	4.45	8.	2.	2.	0.06		
	ROUTED TO	135136	24.	4.50	8.	2.	2.	0.06		
+	4 COMBINED AT	C136	272.	5.00	60.	15.	15.	0.16		
+	DIVERSION TO	D136W	161.	5.00	42.	11.	10.	0.16		
+	HYDROGRAPH AT	D136S	111.	5.00	18.	5.	4.	0.16		
+	ROUTED TO	136137	111.	5.05	18.	5.	4.	0.16		
+	HYDROGRAPH AT	C391F	16.	4.30	4.	1.	1.	0.02		
+	2 COMBINED AT	C137	118.	5.05	22.	6.	5.	0.18		
+	HYDROGRAPH AT	C391G	14.	4.45	4.	1.	1.	0.02		
+	HYDROGRAPH AT	D136W	161.	5.00	42.	11.	10.	0.00		
+	ROUTED TO	136138	160.	5.05	42.	11.	10.	0.00		
+	2 COMBINED AT	C138	170.	5.05	46.	12.	11.	0.02		
+	HYDROGRAPH AT	C391C	45.	4.50	14.	4.	4.	0.07		
+	HYDROGRAPH AT	D111S	170.	5.00	37.	9.	9.	0.00		
+	ROUTED TO	111139	169.	5.10	37.	9.	9.	0.00		
	DIVERSION TO									

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+		D139W	24.	5.10	5.	1.	1.	0.00		
	HYDROGRAPH AT	D139S	144.	5.10	32.	8.	8.	0.00		
+	ROUTED TO	139140	144.	5.10	32.	8.	8.	0.00		
+	DIVERSION TO	D140S	72.	5.10	16.	4.	4.	0.00		
+	HYDROGRAPH AT	D140W	72.	5.10	16.	4.	4.	0.00		
+	ROUTED TO	140141	72.	5.15	16.	4.	4.	0.00		
+	2 COMBINED AT	C141	106.	5.05	30.	8.	7.	0.07		
+	HYDROGRAPH AT	C391H	34.	4.40	9.	2.	2.	0.05		
+	HYDROGRAPH AT	D135W	14.	4.45	3.	1.	1.	0.00		
+	ROUTED TO	135142	14.	4.60	3.	1.	1.	0.00		
+	HYDROGRAPH AT	D140S	72.	5.10	16.	4.	4.	0.00		
+	ROUTED TO	140142	72.	5.15	16.	4.	4.	0.00		
+	3 COMBINED AT	C142	102.	5.10	28.	7.	7.	0.05		
+	HYDROGRAPH AT	C391D	23.	4.40	6.	2.	2.	0.03		
+	HYDROGRAPH AT	D139W	24.	5.10	5.	1.	1.	0.00		
	ROUTED TO	139143	24.	5.10	5.	1.	1.	0.00		
+	2 COMBINED AT	C143	38.	5.05	11.	3.	3.	0.03		
+	HYDROGRAPH AT	C391N	38.	5.15	19.	5.	5.	0.14		
+	7 COMBINED AT	C144	3606.	4.95	899.	228.	219.	4.73		
+	HYDROGRAPH AT	DT384	745.	4.30	144.	36.	35.	2.95		
+	HYDROGRAPH AT	RM384	1295.	4.60	264.	66.	64.	0.99		
+	HYDROGRAPH AT	D383S	1367.	4.60	370.	96.	92.	0.00		
+	ROUTED TO	383384	1348.	4.80	369.	96.	92.	0.00		
+									1.98	4.80
+	3 COMBINED AT	C384	3150.	4.65	778.	198.	190.	3.94		
+	HYDROGRAPH AT	C389A	212.	4.50	60.	15.	15.	0.29		
+	DIVERSION TO	C389AR	36.	4.50	5.	1.	1.	0.29		
+	HYDROGRAPH AT	DC389A	212.	4.50	55.	14.	13.	0.29		
+	HYDROGRAPH AT	D124S	150.	4.65	44.	11.	11.	0.00		
	ROUTED TO	124145	149.	4.90	44.	11.	11.	0.00		

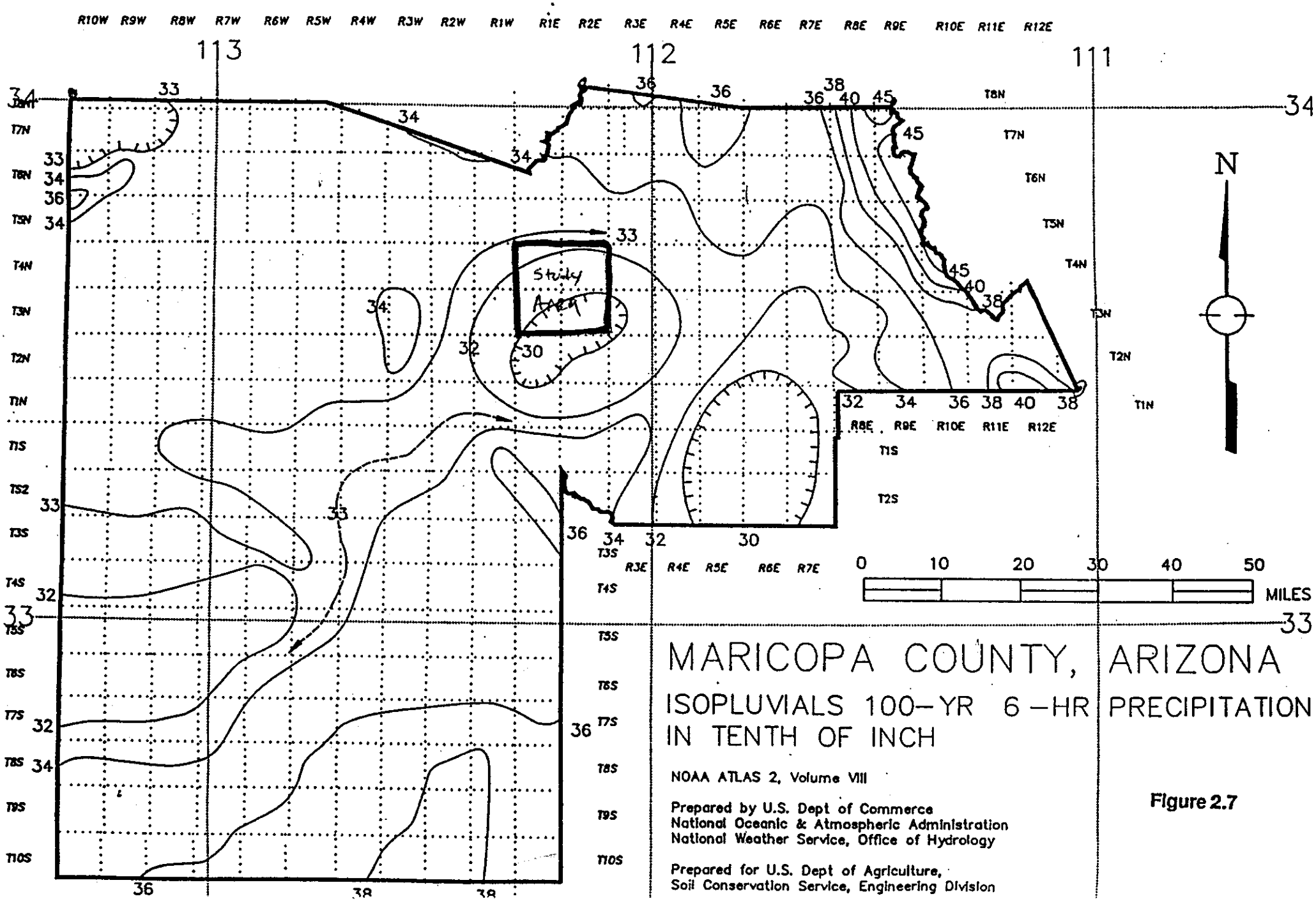
	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	2 COMBINED AT	C145	336.	4.75	99.	25.	24.	0.29		
	HYDROGRAPH AT	C389D	24.	4.30	6.	1.	1.	0.03		
+	HYDROGRAPH AT	C389B	90.	4.45	27.	7.	7.	0.13		
+	DIVERSION TO	C389BR	79.	4.45	8.	2.	2.	0.13		
+	HYDROGRAPH AT	DC389B	90.	4.45	20.	5.	5.	0.13		
+	HYDROGRAPH AT	D125S	203.	4.75	34.	9.	8.	0.00		
+	ROUTED TO	125147	203.	4.90	34.	9.	8.	0.00		
+	2 COMBINED AT	C147	275.	4.85	54.	13.	13.	0.13		
+	HYDROGRAPH AT	C389E	47.	4.15	10.	3.	2.	0.05		
+	HYDROGRAPH AT	C389F	26.	5.15	14.	4.	4.	0.11		
+	6 COMBINED AT	C149	3789.	4.70	959.	244.	235.	4.55		
+	3 COMBINED AT	C150	8360.	4.95	2238.	568.	547.	11.72		

*** NORMAL END OF HEC-1 ***

APPENDIX E. HYDROLOGIC ANALYSIS SUPPORTING DOCUMENTATION

E.1. PRECIPITATION DATA

AGUA FRIA, NEW RIVER, AND SUN CITY SUB-AREA MODEL



MARICOPA COUNTY, ARIZONA

ISOPLUVIALS 100-YR 6-HR PRECIPITATION IN TENTH OF INCH

NOAA ATLAS 2, Volume VIII

Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology

Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division

Figure 2.7

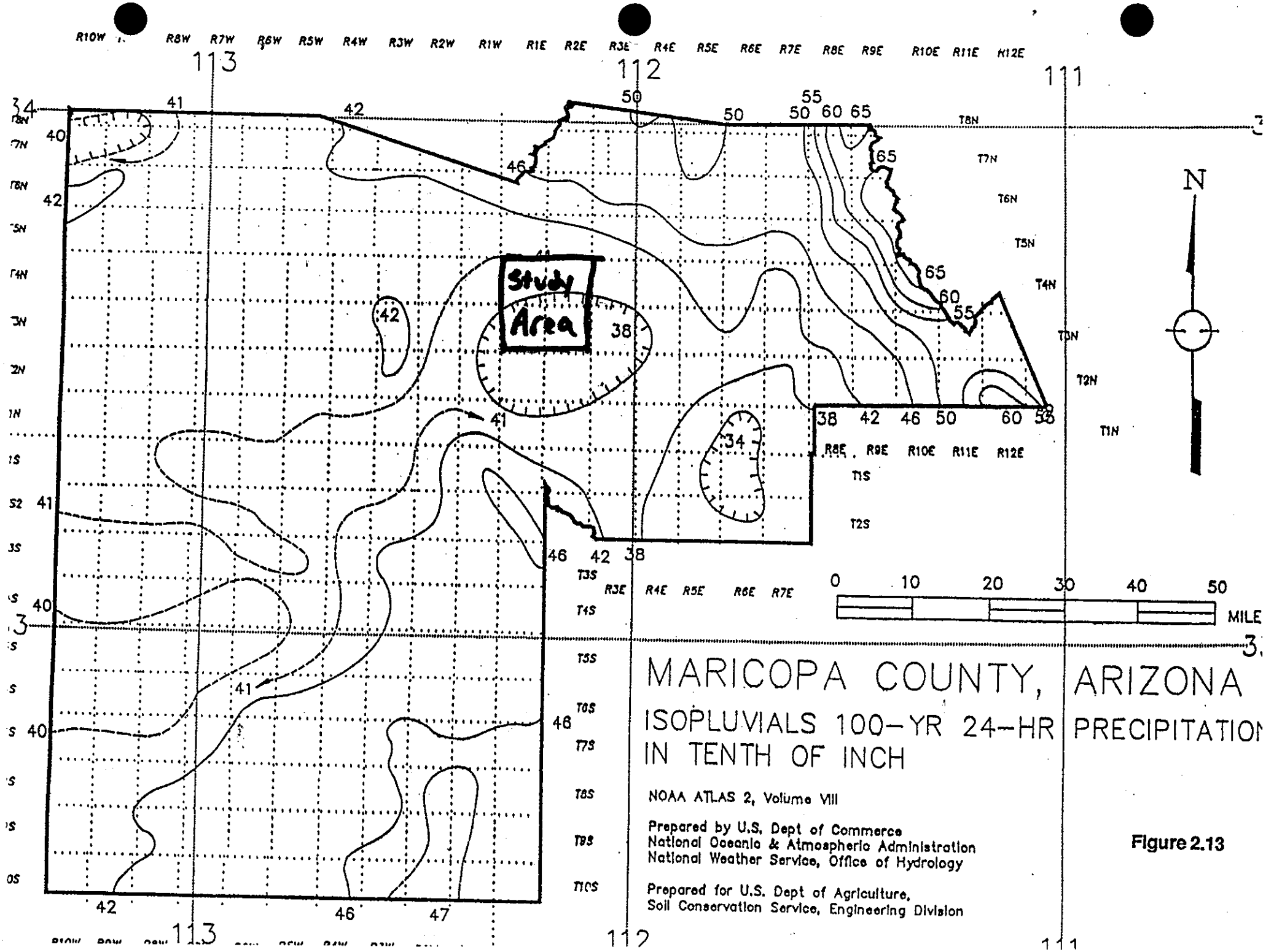

MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 100-YR 24-HR PRECIPITATION
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
Study Area
N
0 10 20 30 40 50
MILE
R10W R9W R8W R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E R9E R10E R11E R12E
T8N T7N T6N T5N T4N T3N T2N T1N T1S T2S T3S T4S T5S T6S T7S T8S T9S T10S
113 112 111
34 33 32
38 40 41 42 46 47 50 55 60 65

Figure 2.13

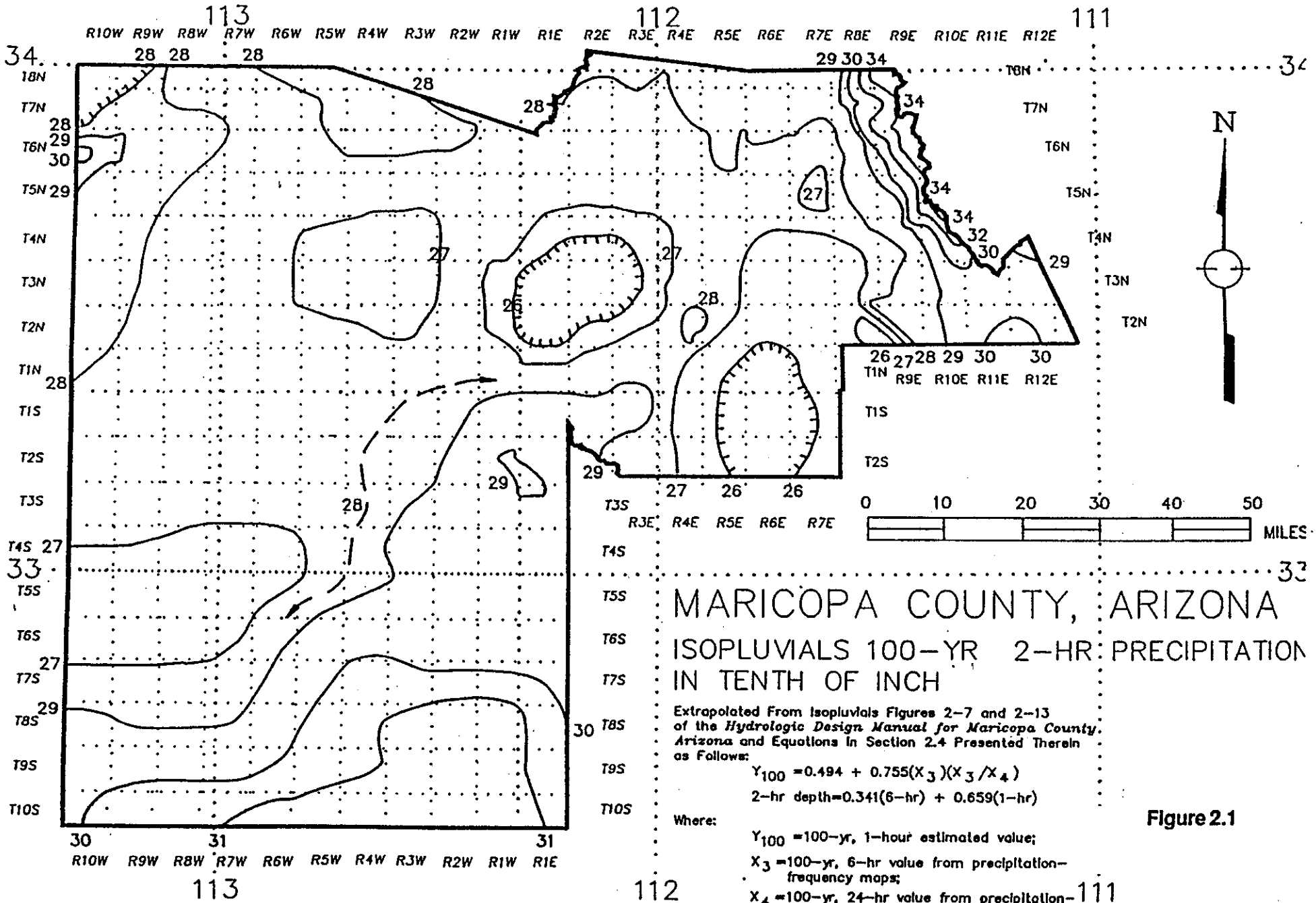
Flood Control District of Maricopa County
GP ADMP UPDATE - GLENDALE/PEORIA ADMP UPDATE

Rainfall Data

Primary Zone Number: 7 Latitude: 0.0 Elevation: 0

Short Duration Zone Number: 8 Longitude: 0.0

	Point Values (in)					
Duration	2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr
5 MIN	0.33	0.42	0.49	0.58	0.66	0.73
10 MIN	0.49	0.64	0.74	0.89	1.00	1.12
15 MIN	0.59	0.80	0.94	1.13	1.28	1.43
30 MIN	0.79	1.07	1.26	1.53	1.74	1.94
1 HOUR	0.96	1.32	1.57	1.90	2.17	2.43
2 HOUR	1.04	1.45	1.73	2.10	2.40	2.69
3 HOUR	1.10	1.54	1.83	2.24	2.55	2.87
6 HOUR	1.20	1.70	2.03	2.49	2.85	3.20
12 HOUR	1.30	1.88	2.26	2.79	3.20	3.60
24 HOUR	1.40	2.06	2.49	3.09	3.54	4.00



MARICOPA COUNTY, ARIZONA

ISOPLUVIALS 100-YR 2-HR PRECIPITATION IN TENTH OF INCH

Extrapolated From Isopluvials Figures 2-7 and 2-13 of the *Hydrologic Design Manual for Maricopa County, Arizona* and Equations In Section 2.4 Presented Therein as Follows:

$$Y_{100} = 0.494 + 0.755(X_3)(X_3/X_4)$$

$$\text{2-hr depth} = 0.341(\text{6-hr}) + 0.659(\text{1-hr})$$

Where:

Y_{100} = 100-yr, 1-hour estimated value;

X_3 = 100-yr, 6-hr value from precipitation-frequency maps;

X_4 = 100-yr, 24-hr value from precipitation-frequency maps;

6-hr = isopluvial values from figure 2.7;

Figure 2.1

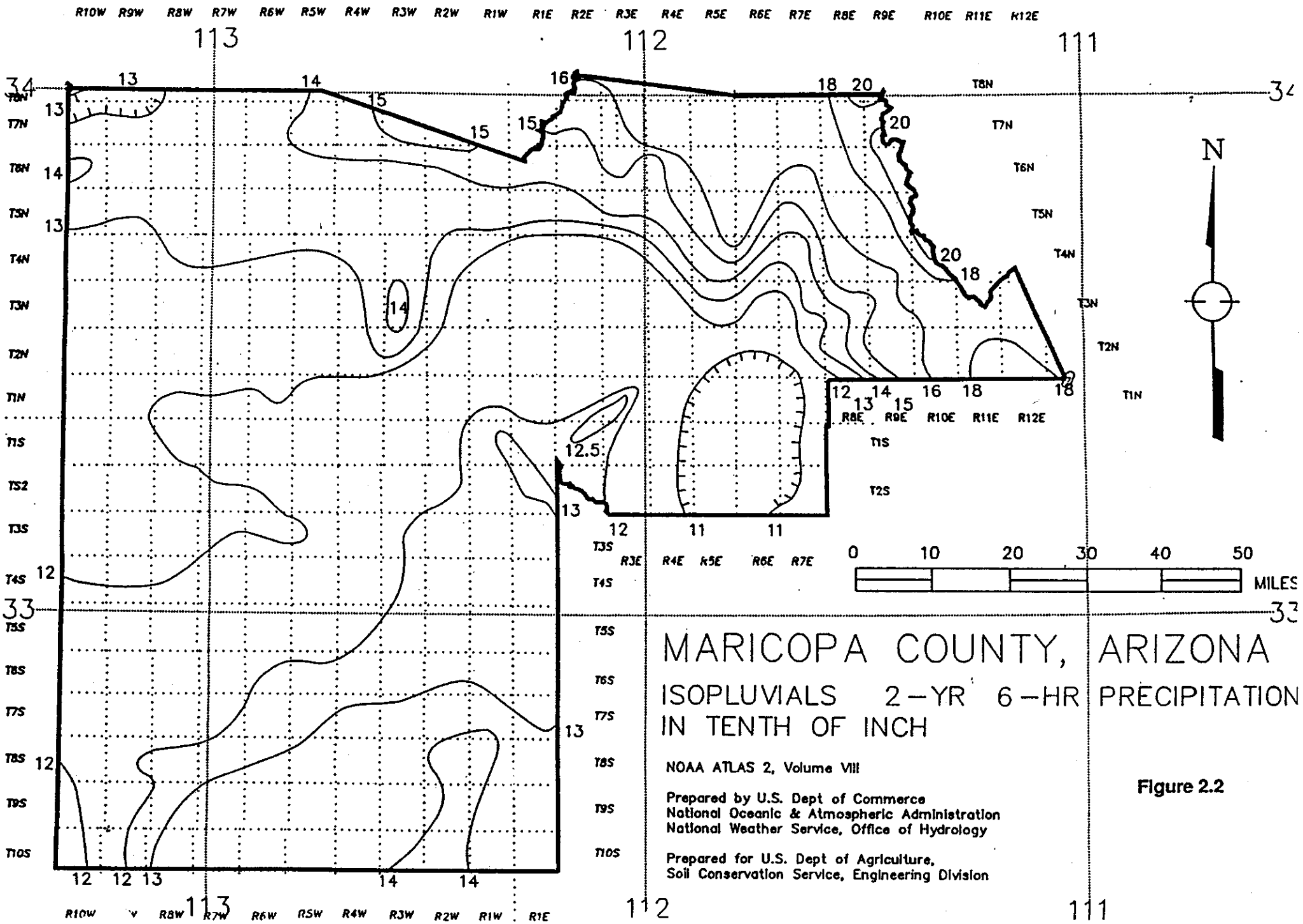
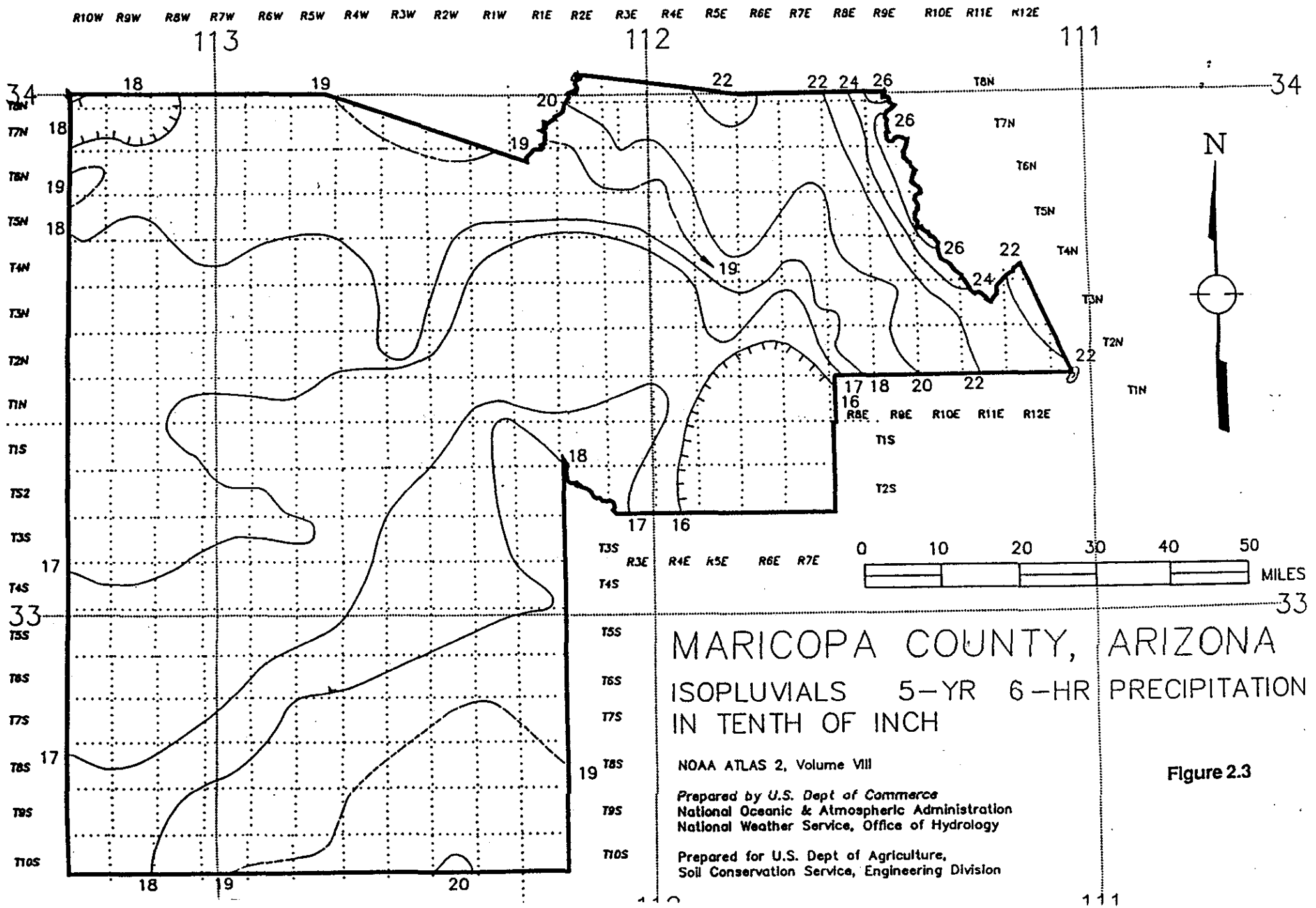

MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 2-YR 6-HR PRECIPITATION
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
N
0 10 20 30 40 50
MILES
113
112
111
34
33

Figure 2.2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T8N
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T6N
T5N
T4N
T3N
T2N
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T9S
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MILES
MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 5-YR 6-HR PRECIPITATION
IN TENTH OF INCH
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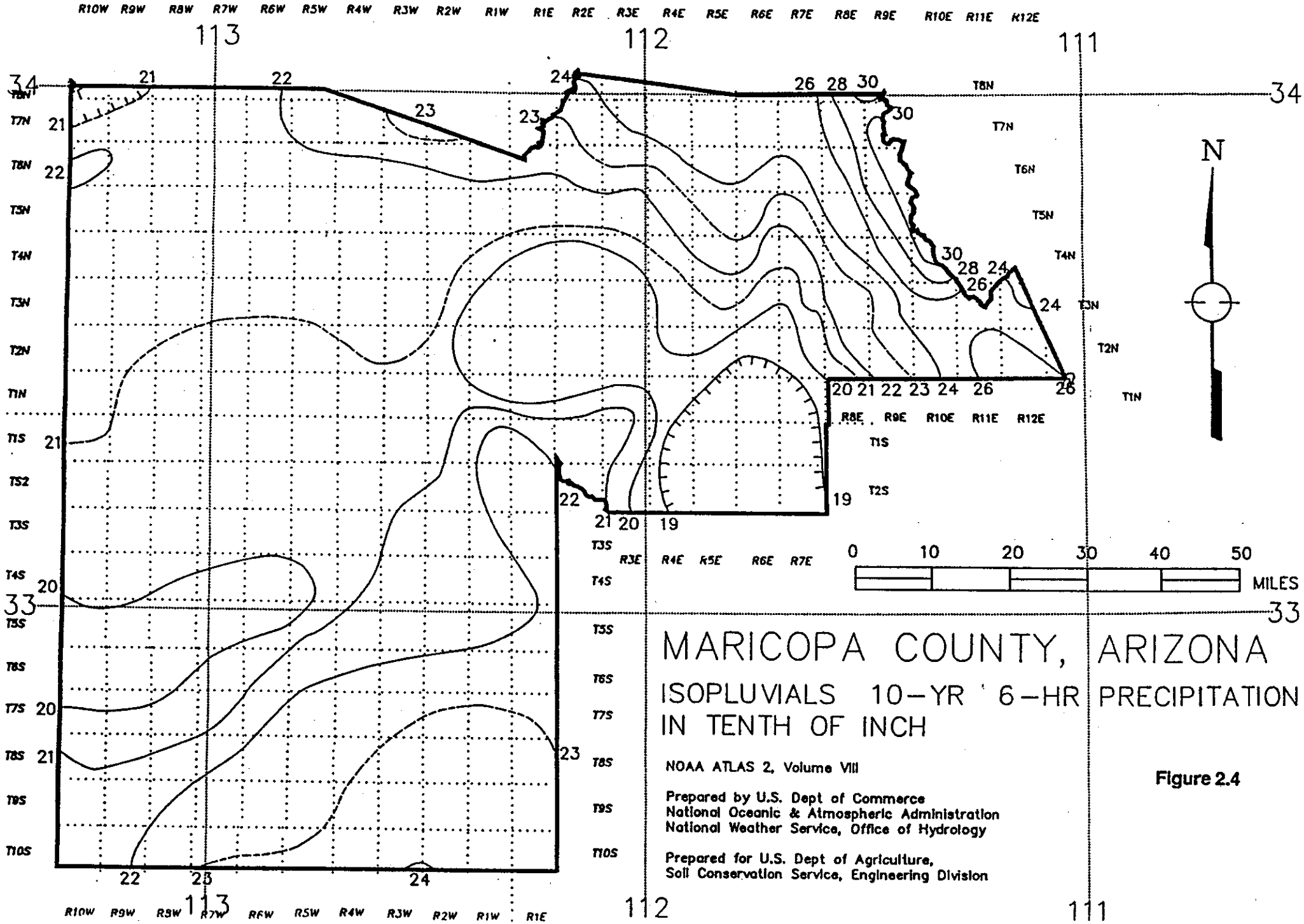
Soil Conservation Service, Engineering Division

Figure 2.3


MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 10-YR 6-HR PRECIPITATION
IN TENTH OF INCH
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National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
N
0 10 20 30 40 50
MILES
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R10W R9W R8W R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E R9E R10E R11E R12E
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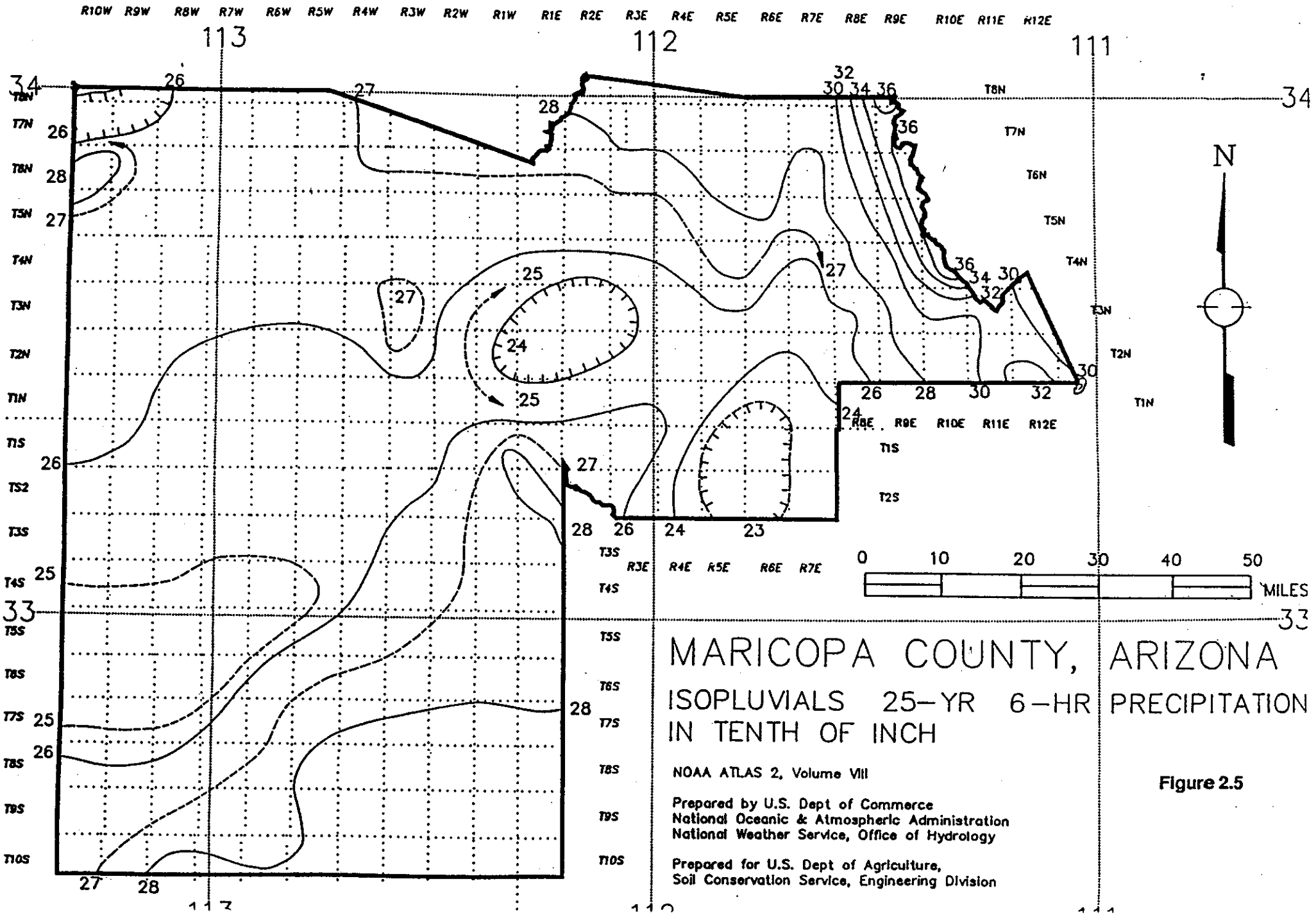
Figure 2.4



MARICOPA COUNTY, ARIZONA

ISOPLUVIALS 25–YR 6–HR PRECIPITATION IN TENTH OF INCH

NOAA ATLAS 2, Volume VIII

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National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology

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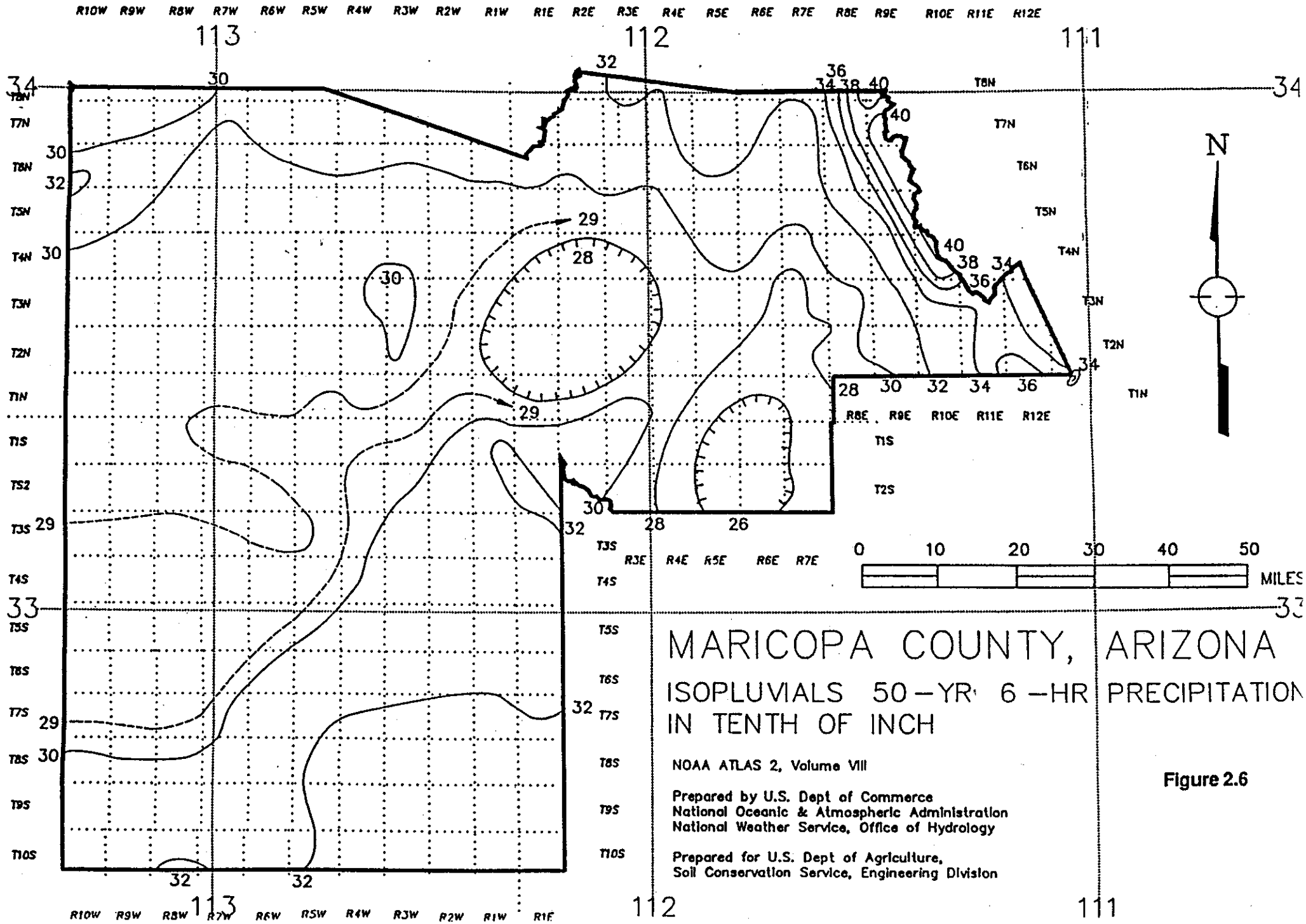
Soil Conservation Service, Engineering Division

Figure 2.5


MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 50-YR 6-HR PRECIPITATION
IN TENTH OF INCH
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Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
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Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
N
0 10 20 30 40 50
MILES
R10W R9W R8W R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E R9E R10E R11E R12E
T8N T7N T6N T5N T4N T3N T2N T1N T1S T2S T3S T4S T5S T6S T7S T8S T9S T10S
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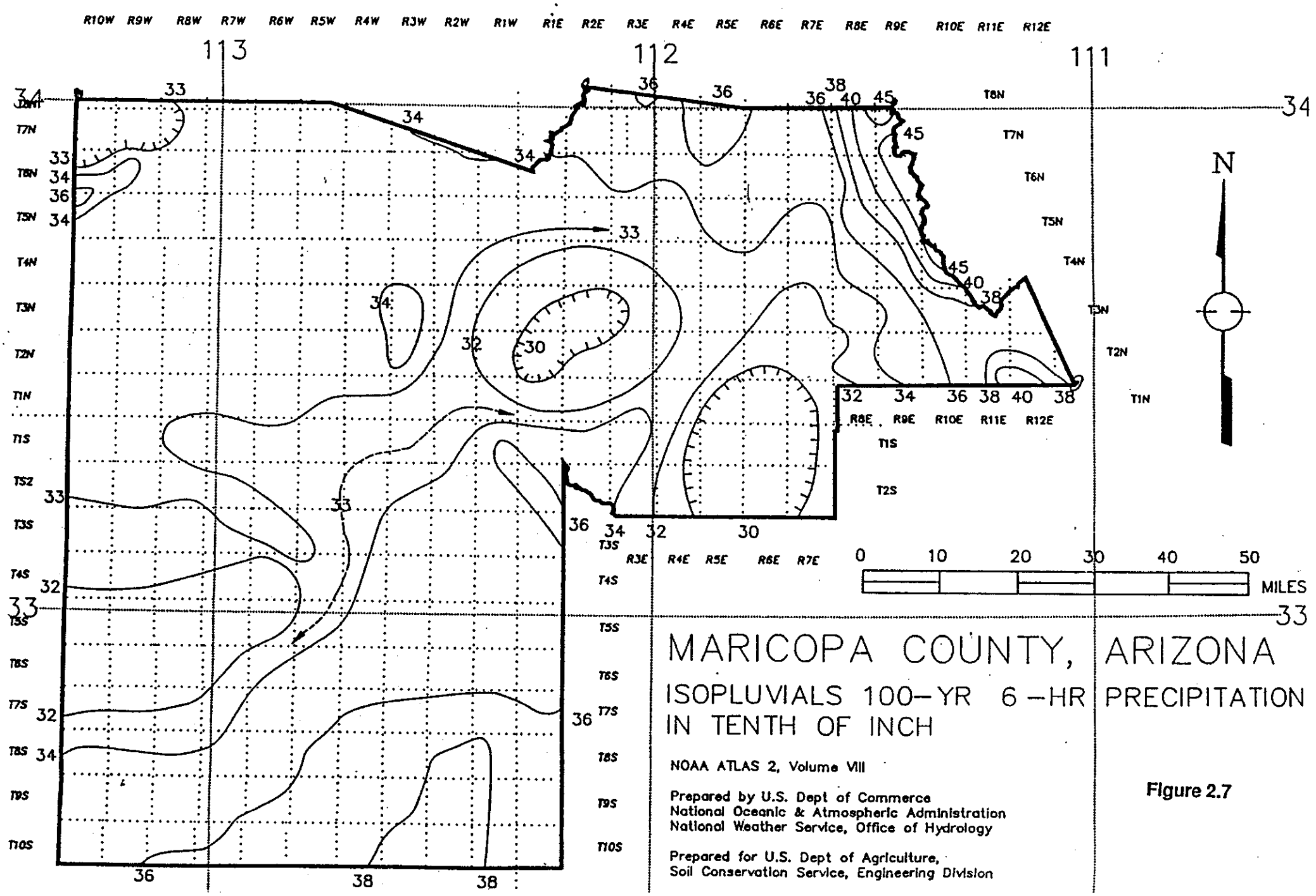
Figure 2.6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113
112
111
T8N
T7N
T6N
T5N
T4N
T3N
T2N
T1N
T1S
T2S
T3S
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MILES
MARICOPA COUNTY, ARIZONA
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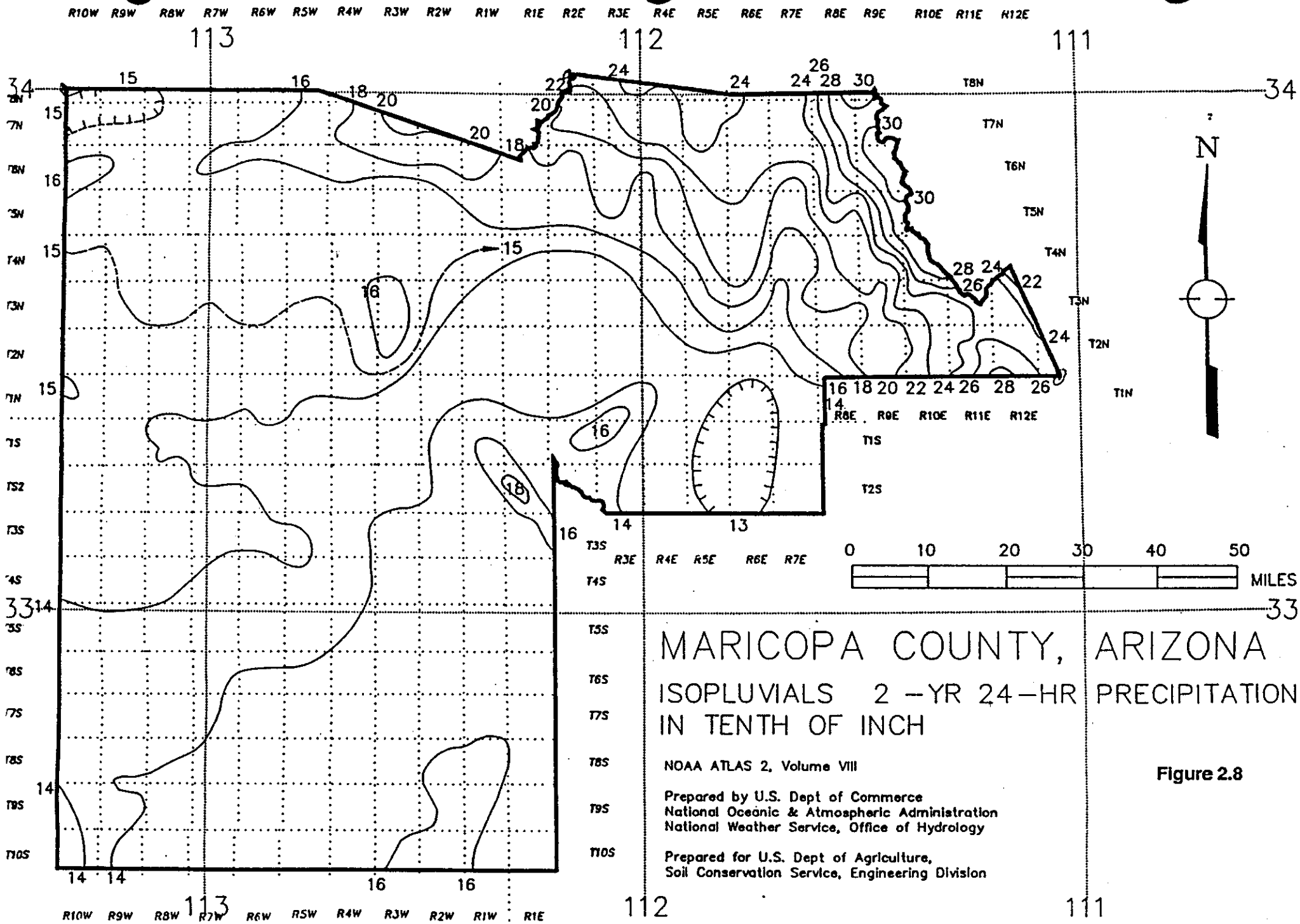
Figure 2.7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ISOPLUVIALS 2 -YR 24-HR PRECIPITATION
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Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
N
0 10 20 30 40 50
MILES
R10W R9W R8W R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E R9E R10E R11E R12E
T8N T7N T6N T5N T4N T3N T2N T1N T1S T2S T3S T4S T5S T6S T7S T8S T9S T10S
113 112 111
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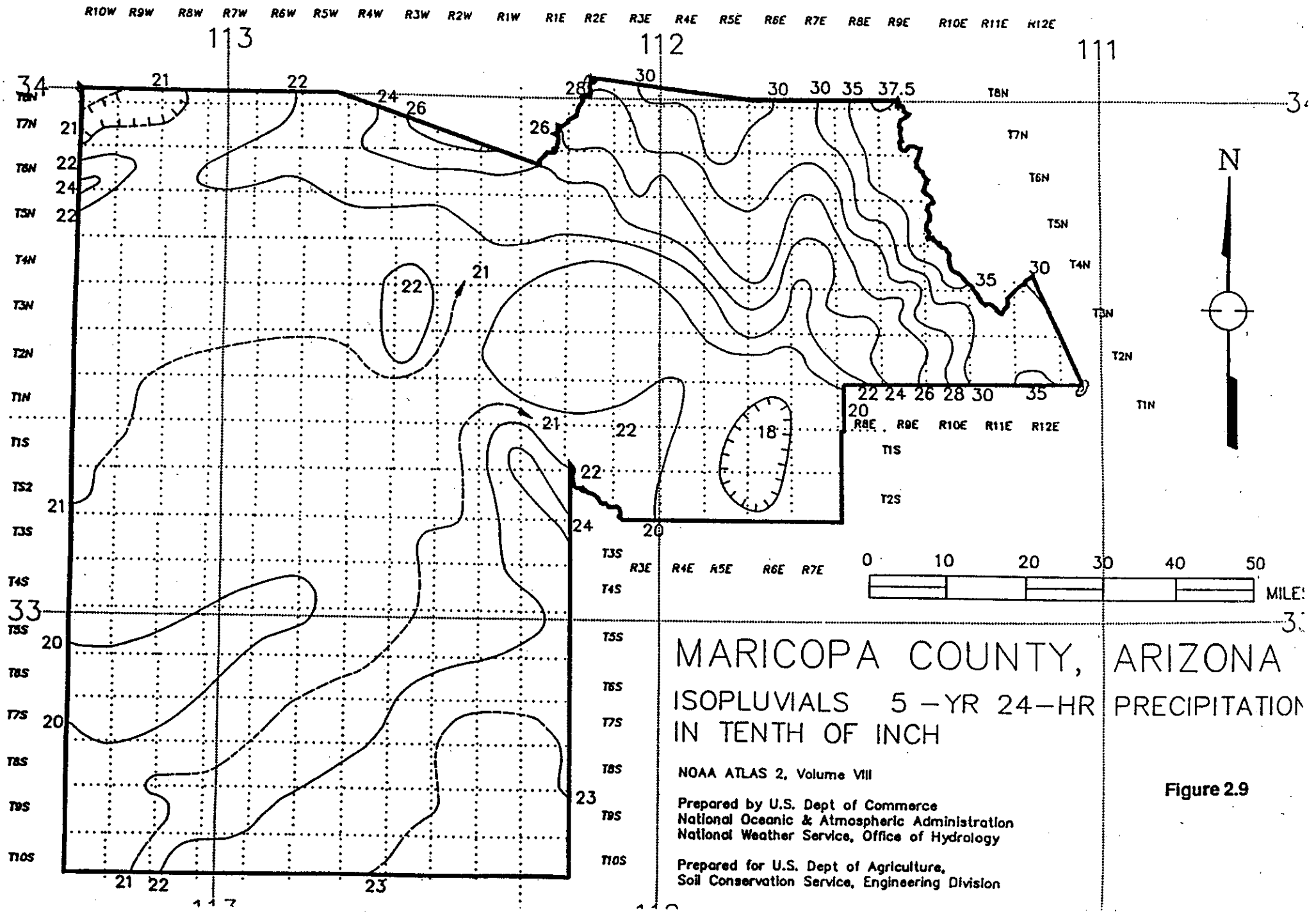
Figure 2.8


MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 5 –YR 24–HR PRECIPITATION
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
N
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MILES
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T8N T7N T6N T5N T4N T3N T2N T1N T1S T2S T3S T4S T5S T6S T7S T8S T9S T10S
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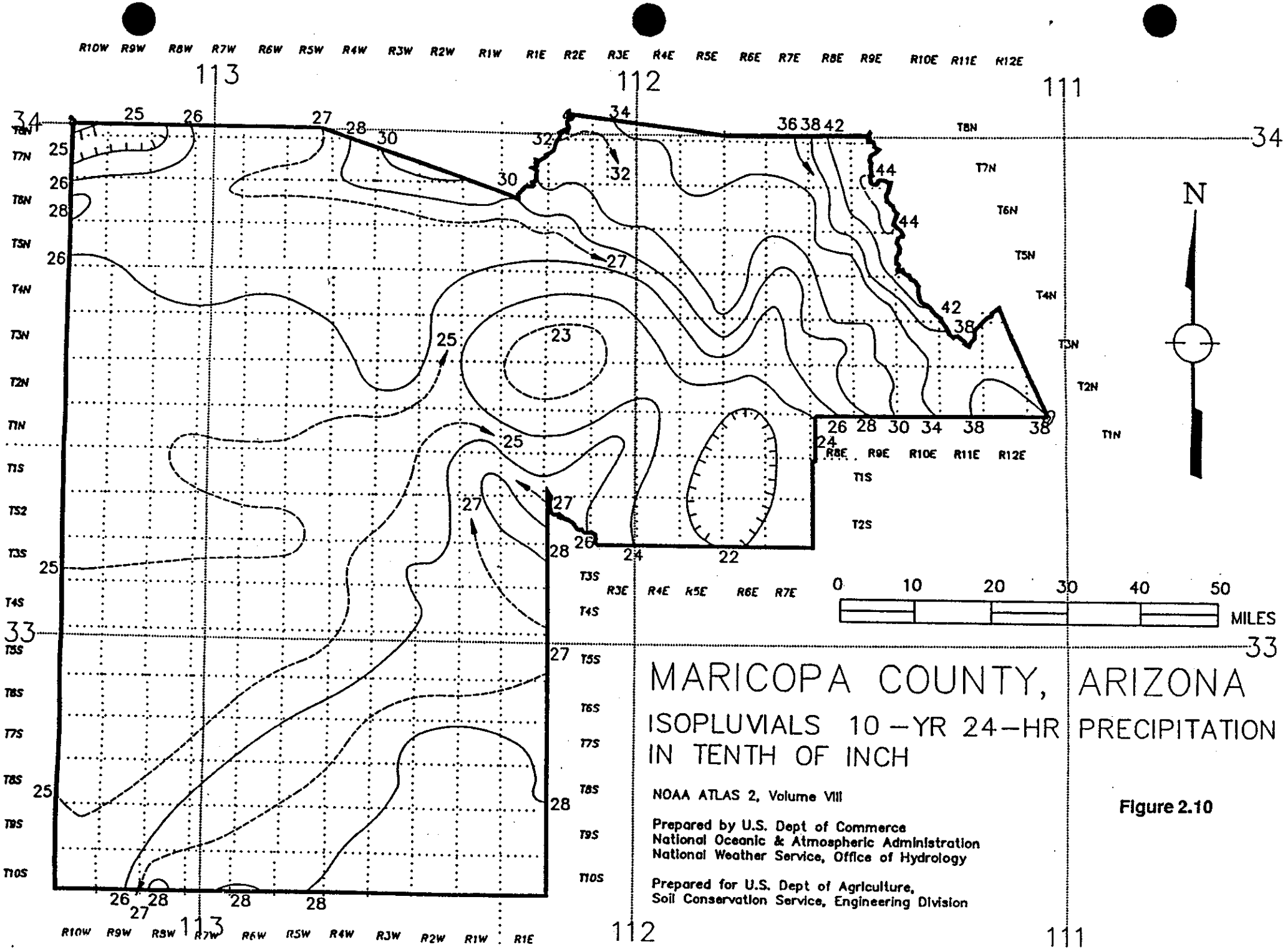
Figure 2.9


MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 10-YR 24-HR PRECIPITATION
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
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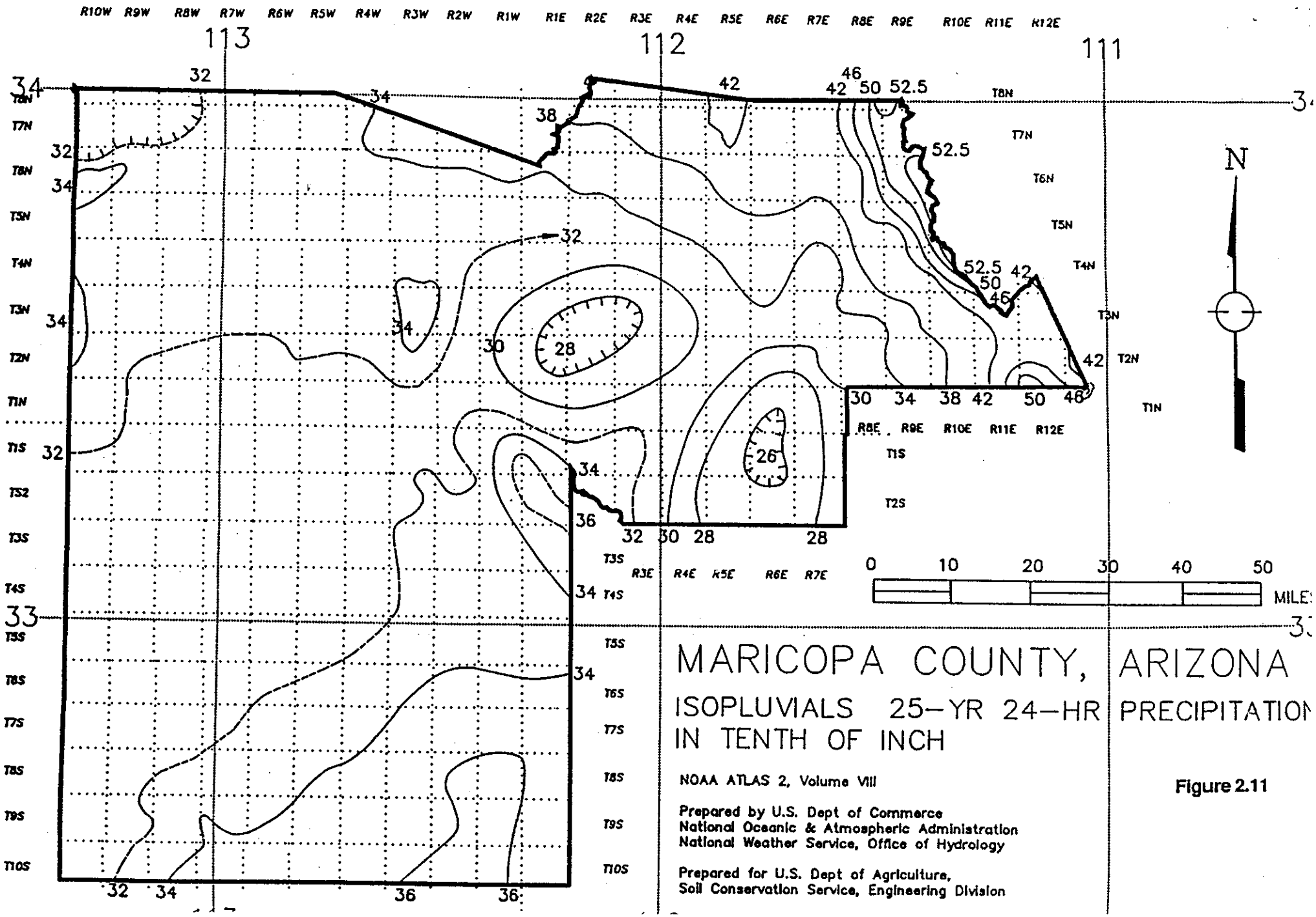
T8N T7N T6N T5N T4N T3N T2N T1N T1S T2S T3S T4S T5S T6S T7S T8S T9S T10S

Figure 2.10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T8N T7N T6N T5N T4N T3N T2N T1N T1S T2S T3S T4S T5S T6S T7S T8S T9S T10S
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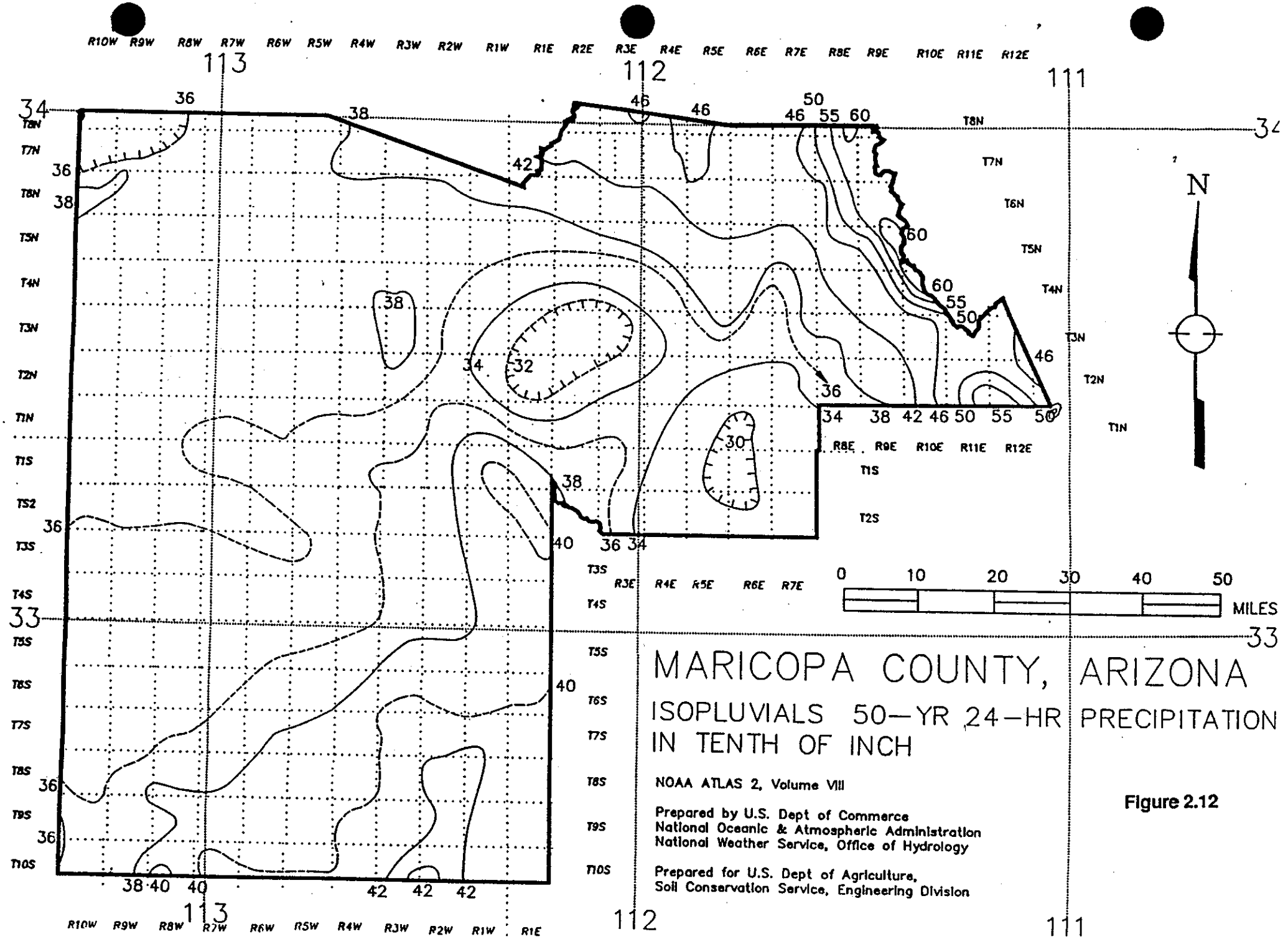
MILES
MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 25-YR 24-HR PRECIPITATION
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division

Figure 2.11


MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 50—YR 24—HR PRECIPITATION
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
N
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MILES
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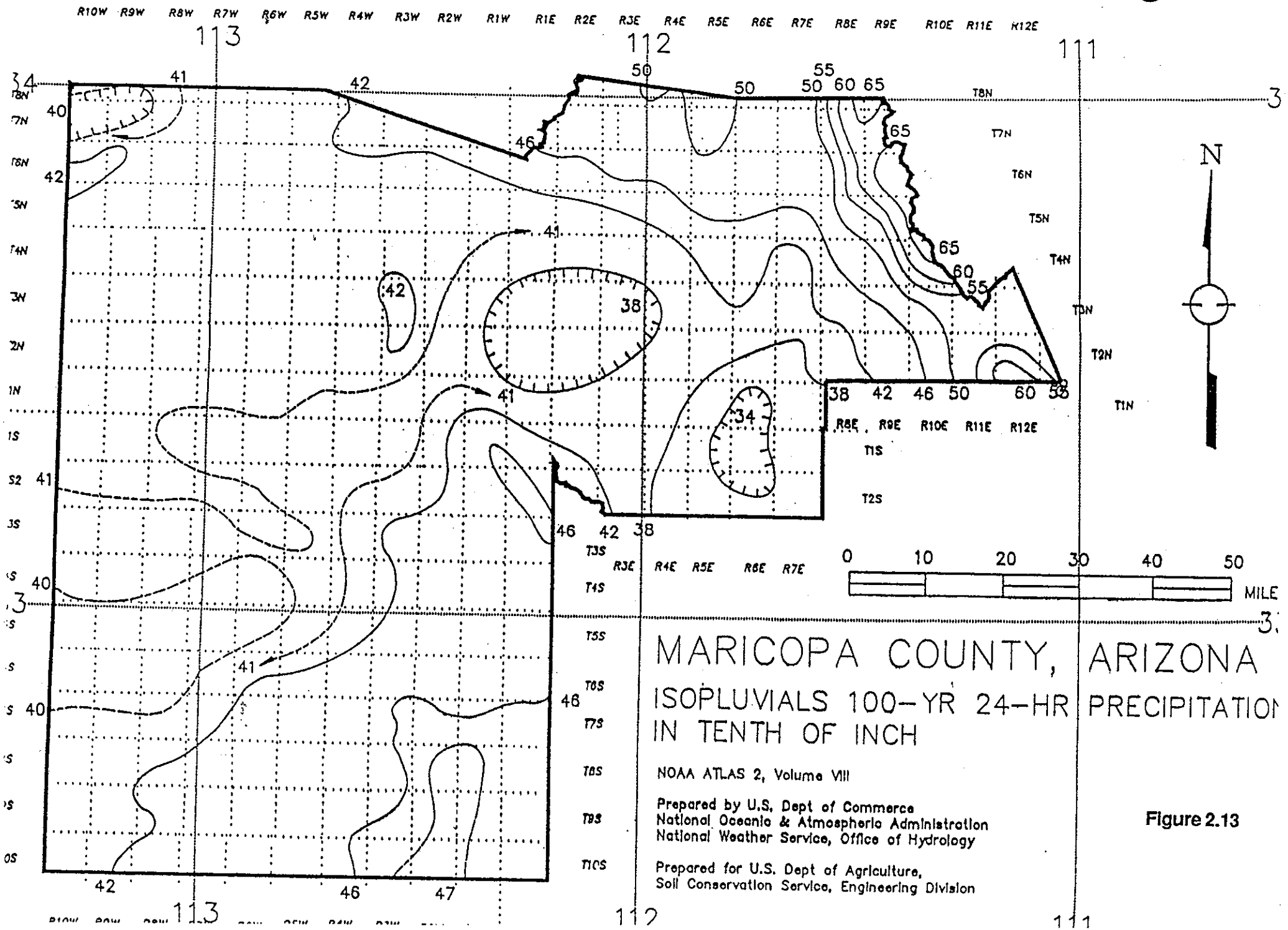
R10W R9W R8W R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E R9E R10E R11E R12E
T8N T7N T6N T5N T4N T3N T2N T1N T1S T2S T3S T4S T5S T6S T7S T8S T9S T10S

Figure 2.12


MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 100-YR 24-HR PRECIPITATION
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
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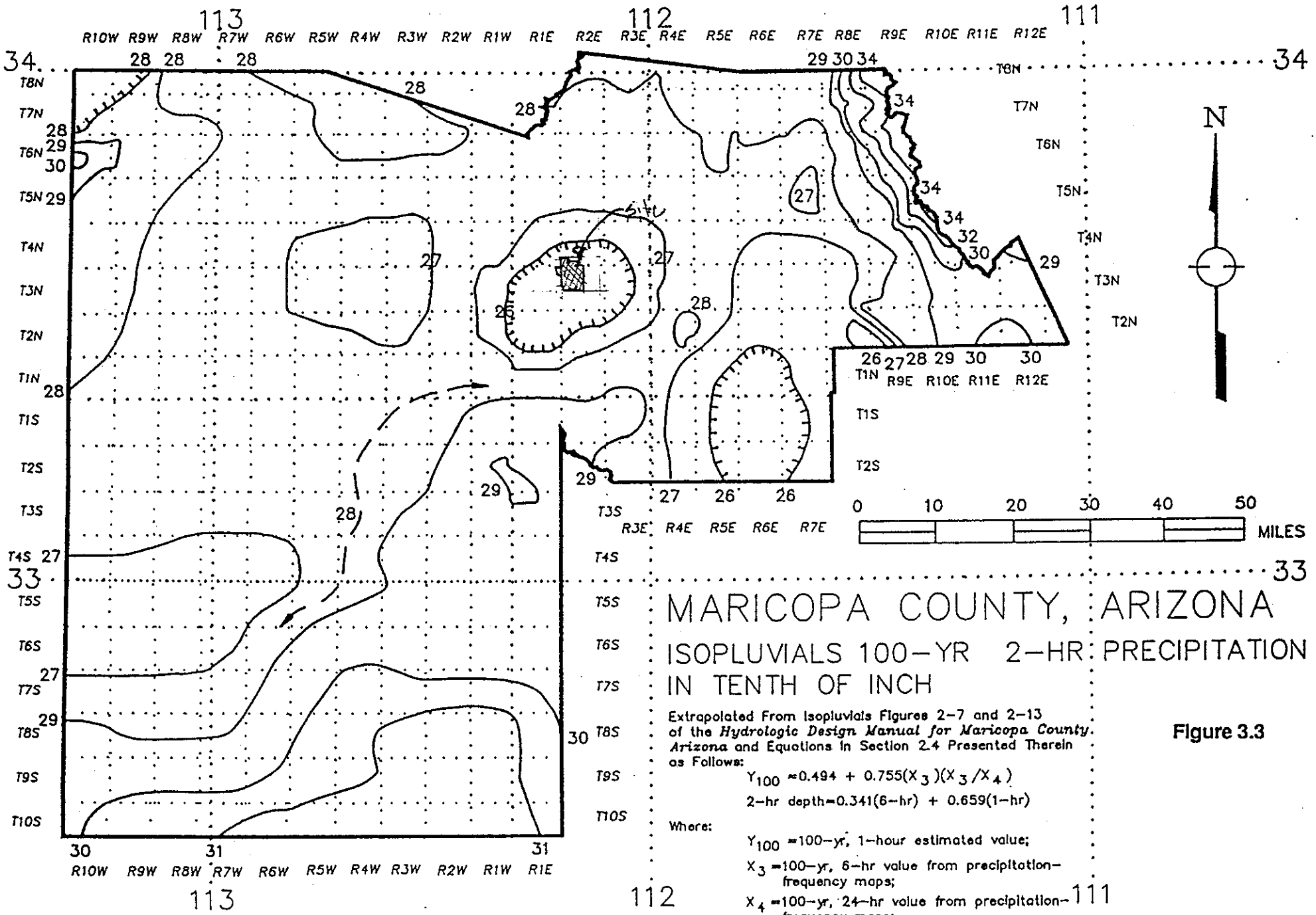
MILE
R10W R9W R8W R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E R9E R10E R11E R12E
T8N T7N T6N T5N T4N T3N T2N T1N T1S T2S T3S T4S T5S T6S T7S T8S T9S T10S
113 112 111

Figure 2.13

ACDC SUB-AREA MODEL



MARICOPA COUNTY, ARIZONA

ISOPLUVIALS 100-YR 2-HR PRECIPITATION IN TENTH OF INCH

Extrapolated From Isopluvials Figures 2-7 and 2-13 of the *Hydrologic Design Manual for Maricopa County, Arizona* and Equations in Section 2.4 Presented Therein as Follows:

$$Y_{100} = 0.494 + 0.755(X_3)(X_3/X_4)$$

$$\text{2-hr depth} = 0.341(\text{6-hr}) + 0.659(\text{1-hr})$$

Where:

Y_{100} = 100-yr, 1-hour estimated value;

X_3 = 100-yr, 6-hr value from precipitation-frequency maps;

X_4 = 100-yr, 24-hr value from precipitation-frequency maps;

6-hr = isopluvial values from figure 2.7;

1-hr = Y_{100} value as computed above

Figure 3.3

E.2. PHYSICAL PARAMETER CALCULATIONS

AGUA FRIA, NEW RIVER, AND SUN CITY SUB-AREA MODEL

SUBBASIN INFORMATION

Sub Basin Data

Storms: Multiple Duration: 6 Hours Loss Method: Green Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
398A	0.10	0.34	582.4	315.0	Natural	0.105	0.15	0.35	4.00	0.45 *	61	Tc (hrs)	0.31	0.24	0.22	0.20	0.19	0.18
												R (hrs)	0.16	0.12	0.11	0.10	0.09	0.09
398B	0.14	0.93	30.1	30.1	Urban	0.048	0.17	0.17	4.65	0.39 *	63	Tc (hrs)	0.88	0.71	0.63	0.55	0.51	0.48
												R (hrs)	0.95	0.74	0.66	0.57	0.51	0.48
398C	0.09	0.87	9.2	9.2	Urban	0.050	0.17	0.16	6.20	0.20 *	59	Tc (hrs)	1.48	1.16	1.02	0.90	0.83	0.77
												R (hrs)	1.96	1.51	1.30	1.13	1.03	0.95
398D	0.08	0.24	291.7	315.0	Natural	0.082	0.15	0.35	3.95	0.47 *	65	Tc (hrs)	0.21	0.18	0.16	0.15	0.14	0.13
												R (hrs)	0.09	0.07	0.07	0.06	0.06	0.05
398E	0.11	0.38	573.7	315.0	Natural	0.096	0.20	0.35	4.60	0.33 *	49	Tc (hrs)	0.33	0.25	0.23	0.20	0.19	0.18
												R (hrs)	0.17	0.13	0.11	0.10	0.10	0.09
398F	0.20	2.05	72.2	72.2	Urban	0.046	0.18	0.17 *	4.35	0.48 *	77	Tc (hrs)	0.96	0.78	0.71	0.63	0.58	0.54
												R (hrs)	1.55	1.24	1.11	0.97	0.89	0.82
398G	0.22	1.21	5.8	5.8	Urban	0.046	0.18	0.18	3.60	0.72 *	57	Tc (hrs)	1.50	1.50	1.50	1.44	1.31	1.21
												R (hrs)	1.60	1.60	1.60	1.53	1.38	1.26
A01	0.20	0.82	17.1	17.1	Natural	0.027	0.10	0.35	3.21	0.74	5	Tc (hrs)	1.50	0.94	0.73	0.58	0.50	0.45
												R (hrs)	1.23	0.73	0.56	0.43	0.37	0.32
A01A	0.05	0.43	32.6	32.6	Natural	0.031	0.10	0.35	3.25	0.72	5	Tc (hrs)	1.06	0.45	0.35	0.28	0.25	0.23
												R (hrs)	1.09	0.43	0.32	0.25	0.22	0.20
A01B	0.15	0.39	35.9	35.9	Natural	0.028	0.10	0.35	2.95	0.89	6	Tc (hrs)	1.03	0.41	0.31	0.25	0.23	0.21
												R (hrs)	0.53	0.19	0.14	0.11	0.10	0.09
A01C	0.22	0.69	14.5	14.5	Urban	0.027	0.10	0.26	3.53	0.85	60	Tc (hrs)	0.72	0.56	0.50	0.44	0.40	0.37
												R (hrs)	0.45	0.34	0.30	0.26	0.24	0.22
A01D	0.21	0.77	48.1	48.1	Natural	0.029	0.11	0.31	4.30	0.43	31	Tc (hrs)	0.58	0.41	0.35	0.30	0.28	0.26
												R (hrs)	0.39	0.27	0.23	0.19	0.17	0.16
A01E	0.08	0.51	41.2	41.2	Urban	0.031	0.14	0.28	4.45	0.45	56	Tc (hrs)	0.41	0.31	0.28	0.25	0.23	0.22
												R (hrs)	0.33	0.25	0.22	0.19	0.18	0.17

Sub Basin Data

Basin: 0 Storm: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A01F	0.28	1.09	38.5	38.5	Urban	0.041	0.17	0.30	4.30	0.42	26	Tc (hrs)	1.13	0.78	0.68	0.57	0.50	0.46
												R (hrs)	0.94	0.62	0.53	0.44	0.38	0.35
A01G	0.19	0.02	450.0	315.0	Urban	0.029	0.10	0.32	4.00	0.48	21	Tc (hrs)	0.08	0.08	0.08	0.08	0.08	0.08
												R (hrs)	0.00	0.00	0.00	0.00	0.00	0.00
A01H	0.07	0.04	475.0	300.0	Urban	0.030	0.10	0.35	2.97	0.87	5	Tc (hrs)	0.10	0.08	0.08	0.08	0.08	0.08
												R (hrs)	0.01	0.01	0.01	0.01	0.01	0.01
A02	0.02	0.17	17.6	17.6	Natural	0.035	0.10	0.35	2.61	1.15	5	Tc (hrs)	1.13	0.45	0.31	0.24	0.21	0.20
												R (hrs)	1.05	0.38	0.25	0.19	0.16	0.15
A02A	0.61	1.16	22.4	22.4	Natural	0.066	0.33	0.16	3.95	0.60	4	Tc (hrs)	1.50	1.50	1.50	1.34	1.16	1.02
												R (hrs)	0.87	0.87	0.87	0.77	0.65	0.57
A02B	0.27	0.49	87.8	87.8	Urban	0.052	0.27	0.29	4.10	0.50	24	Tc (hrs)	0.60	0.38	0.32	0.27	0.25	0.23
												R (hrs)	0.25	0.15	0.13	0.10	0.09	0.09
A02C	0.33	1.03	22.3	22.3	Urban	0.045	0.18	0.29	4.60	0.35	24	Tc (hrs)	1.48	1.03	0.88	0.75	0.66	0.60
												R (hrs)	1.10	0.73	0.62	0.51	0.45	0.40
A02D	0.06	0.02	450.0	315.0	Natural	0.062	0.36	0.33	2.76	1.14		Tc (hrs)	1.00	0.08	0.08	0.08	0.08	0.08
												R (hrs)	0.08	0.01	0.01	0.01	0.01	0.01
A03	0.28	1.01	16.8	16.8	Natural	0.048	0.32	0.35	3.33	0.72		Tc (hrs)	1.50	1.50	1.50	1.22	1.04	0.92
												R (hrs)	1.22	1.22	1.22	0.97	0.81	0.71
A03A	0.14	0.62	64.5	64.5	Natural	0.053	0.33	0.34	3.71	0.58	4	Tc (hrs)	1.50	0.73	0.54	0.43	0.36	0.33
												R (hrs)	1.21	0.54	0.39	0.30	0.25	0.22
A03B	0.07	0.41	112.2	112.2	Natural	0.060	0.32	0.33	3.38	0.74	8	Tc (hrs)	1.03	0.46	0.34	0.26	0.24	0.22
												R (hrs)	0.84	0.34	0.25	0.18	0.16	0.15
A03C	0.33	0.85	31.8	31.8	Urban	0.049	0.26	0.26	4.25	0.50	23	Tc (hrs)	1.33	0.87	0.73	0.61	0.55	0.50
												R (hrs)	0.84	0.53	0.44	0.36	0.31	0.28
A03D	0.13	0.61	16.4	16.4	Natural	0.054	0.35	0.35	3.05	0.90		Tc (hrs)	1.50	1.50	1.38	0.97	0.82	0.72
												R (hrs)	1.26	1.26	1.15	0.78	0.64	0.56

Sub Basin Data

Basin: 03 Storms: Multiple Duration: 6 Hour Loss Method: Green Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A03E	0.15	0.87	48.3	48.3	Urban	0.053	0.22	0.28	3.88	0.56	27	Tc (hrs)	1.12	0.76	0.65	0.54	0.48	0.44
												R (hrs)	1.10	0.71	0.59	0.49	0.43	0.39
A04	0.08	0.45	44.4	44.4	Natural	0.052	0.28	0.35	3.23	0.78	2	Tc (hrs)	1.50	0.79	0.55	0.42	0.35	0.31
												R (hrs)	1.31	0.65	0.43	0.32	0.26	0.23
A04A	0.22	0.75	30.7	30.7	Urban	0.050	0.24	0.25	4.60	0.39	40	Tc (hrs)	0.95	0.70	0.62	0.53	0.48	0.44
												R (hrs)	0.65	0.47	0.41	0.34	0.30	0.28
A05	0.13	0.38	134.2	134.2	Urban	0.057	0.30	0.30	3.95	0.52	19	Tc (hrs)	0.50	0.30	0.25	0.22	0.20	0.19
												R (hrs)	0.25	0.14	0.12	0.10	0.09	0.09
A05A	0.14	0.78	26.9	26.9	Urban	0.049	0.24	0.15	8.80	0.08	31	Tc (hrs)	0.89	0.67	0.59	0.52	0.48	0.45
												R (hrs)	0.81	0.58	0.51	0.44	0.40	0.37
A06	0.28	0.38	23.7	23.7	Natural	0.049	0.35	0.35	3.58	0.61		Tc (hrs)	0.08	0.87	0.60	0.46	0.39	0.35
												R (hrs)	0.02	0.30	0.20	0.15	0.13	0.11
A06A	0.28	0.91	56.0	56.0	Urban	0.046	0.21	0.30	4.70	0.34	19	Tc (hrs)	0.96	0.65	0.55	0.45	0.41	0.38
												R (hrs)	0.68	0.44	0.37	0.30	0.26	0.24
A07	0.12	0.15	53.3	53.3	Natural	0.058	0.33	0.33	3.21	0.83	6	Tc (hrs)	0.84	0.33	0.24	0.20	0.18	0.17
												R (hrs)	0.23	0.08	0.06	0.05	0.04	0.04
A07A	0.12	0.88	18.2	18.2	Urban	0.050	0.21	0.30	3.92	0.51	16	Tc (hrs)	1.50	1.25	1.04	0.86	0.76	0.69
												R (hrs)	1.72	1.41	1.14	0.93	0.81	0.73
A07B	0.65	1.58	41.1	41.1	Urban	0.035	0.16	0.31	4.60	0.34	18	Tc (hrs)	1.43	0.95	0.81	0.67	0.59	0.53
												R (hrs)	1.01	0.65	0.54	0.44	0.38	0.34
A07C	0.18	0.65	36.9	36.9	Natural	0.056	0.35	0.33	4.90	0.30	1	Tc (hrs)	1.50	0.87	0.69	0.55	0.48	0.43
												R (hrs)	1.11	0.60	0.47	0.37	0.31	0.28
A07D	0.23	1.08	20.4	20.4	Urban	0.095	0.49	0.02	4.10	0.67	1	Tc (hrs)	1.50	1.50	1.50	1.50	1.37	1.23
												R (hrs)	1.43	1.43	1.43	1.43	1.29	1.15
A07E	0.23	0.70	37.1	37.1	Urban	0.053	0.23	0.16	7.30	0.13	47	Tc (hrs)	0.73	0.57	0.50	0.44	0.41	0.39
												R (hrs)	0.46	0.35	0.30	0.26	0.24	0.23

Sub Basin Data

Basin: [illegible] Storms: Multiple [illegible] Duration: 6 Hour [illegible] Loss Method: Green-Ampt [illegible] Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A07F	0.23	1.16	17.2	17.2	Urban	0.046	0.23	0.25	4.90	0.37	33	Tc (hrs)	1.50	1.23	1.06	0.90	0.81	0.74
												R (hrs)	1.50	1.20	1.02	0.86	0.76	0.69
A07G	0.26	0.70	42.9	42.9	Urban	0.039	0.14	0.25	7.60	0.09	22	Tc (hrs)	0.59	0.44	0.39	0.34	0.32	0.30
												R (hrs)	0.33	0.24	0.21	0.18	0.17	0.16
A07H	0.09	0.30	66.7	66.7	Urban	0.062	0.28	0.23	4.70	0.39	24	Tc (hrs)	0.48	0.32	0.28	0.24	0.23	0.21
												R (hrs)	0.24	0.16	0.13	0.11	0.10	0.10
A08	0.08	0.11	36.4	36.4	Urban	0.061	0.30	0.31	3.19	0.88	14	Tc (hrs)	0.53	0.29	0.23	0.19	0.18	0.16
												R (hrs)	0.14	0.07	0.05	0.04	0.04	0.04
A08A	0.14	0.92	12.0	12.0	Urban	0.047	0.20	0.30	3.31	0.77	18	Tc (hrs)	1.50	1.50	1.32	1.08	0.96	0.87
												R (hrs)	1.68	1.68	1.46	1.17	1.02	0.91
A08B	0.10	0.44	18.2	18.2	Urban	0.057	0.25	0.29	3.74	0.59	16	Tc (hrs)	1.44	0.85	0.70	0.58	0.51	0.46
												R (hrs)	1.08	0.60	0.48	0.39	0.34	0.30
A09	0.18	0.36	16.7	16.7	Natural	0.052	0.31	0.34	3.58	0.61	3	Tc (hrs)	1.50	0.92	0.68	0.53	0.46	0.40
												R (hrs)	0.69	0.40	0.29	0.22	0.19	0.16
A09A	0.08	0.53	17.0	17.0	Urban	0.078	0.33	0.16	3.74	0.76	23	Tc (hrs)	1.50	1.20	1.01	0.85	0.76	0.68
												R (hrs)	1.43	1.12	0.92	0.76	0.67	0.60
A09B	0.04	0.25	80.0	80.0	Urban	0.035	0.12	0.25	4.10	0.60	56	Tc (hrs)	0.22	0.18	0.17	0.15	0.14	0.14
												R (hrs)	0.14	0.11	0.10	0.09	0.09	0.08
A09C	0.07	0.52	51.9	51.9	Natural	0.062	0.35	0.32	4.50	0.38	3	Tc (hrs)	1.50	1.56	0.54	0.43	0.38	0.34
												R (hrs)	1.53	1.60	0.49	0.39	0.33	0.30
A09D	0.25	0.44	31.8	31.8	Urban	0.049	0.22	0.20	6.60	0.16	31	Tc (hrs)	0.58	0.44	0.38	0.34	0.31	0.29
												R (hrs)	0.23	0.17	0.14	0.13	0.12	0.11
A09E	0.15	0.80	11.3	11.3	Urban	0.049	0.19	0.26	4.70	0.34	32	Tc (hrs)	1.50	1.18	1.01	0.86	0.78	0.71
												R (hrs)	1.45	1.10	0.94	0.78	0.70	0.63
A09F	0.37	0.90	17.8	17.8	Urban	0.044	0.19	0.30	5.30	0.25	21	Tc (hrs)	1.43	1.00	0.86	0.72	0.64	0.58
												R (hrs)	0.90	0.61	0.51	0.42	0.37	0.33

* Non default value

Sub Basin Data

Basin: (0) Storms: Multiple Duration: 6 Hour Loss Method: Green/Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A09G	0.22	0.57	29.8	29.8	Natural	0.050	0.35	0.35	4.30	0.41		Tc (hrs)	1.50	1.55	0.68	0.53	0.46	0.41
												R (hrs)	0.88	0.91	0.37	0.28	0.24	0.21
A09H	0.25	0.60	20.0	20.0	Natural	0.050	0.34	0.35	4.55	0.35		Tc (hrs)	1.50	1.08	1.55	0.66	0.57	0.50
												R (hrs)	0.86	0.59	0.89	0.34	0.29	0.26
A09I	0.17	0.52	19.2	19.2	Urban	0.054	0.25	0.27	6.20	0.19	23	Tc (hrs)	1.01	0.73	0.62	0.52	0.47	0.44
												R (hrs)	0.61	0.43	0.36	0.29	0.26	0.24
A09J	0.17	0.68	30.9	30.9	Natural	0.052	0.34	0.35	4.35	0.39		Tc (hrs)	1.50	1.02	0.78	0.62	0.53	0.47
												R (hrs)	1.18	0.77	0.57	0.44	0.37	0.33
A09K	0.41	1.12	36.6	36.6	Natural	0.047	0.35	0.35	4.40	0.38		Tc (hrs)	0.08	1.30	0.99	0.78	0.68	0.59
												R (hrs)	0.04	0.90	0.67	0.51	0.43	0.38
A09L	0.14	0.68	17.6	17.6	Urban	0.051	0.22	0.28	4.90	0.31	22	Tc (hrs)	1.35	0.93	0.80	0.67	0.59	0.54
												R (hrs)	1.18	0.78	0.66	0.54	0.47	0.43
A09M	0.25	0.77	59.7	59.7	Urban	0.040	0.21	0.35	4.45	0.34	6	Tc (hrs)	0.96	0.55	0.45	0.36	0.33	0.30
												R (hrs)	0.64	0.34	0.28	0.22	0.19	0.18
A09N	0.11	0.48	4.2	4.2	Natural	0.042	0.18	0.36	5.80	0.18	9	Tc (hrs)	1.50	1.26	1.05	0.85	0.75	0.68
												R (hrs)	1.14	0.93	0.77	0.61	0.53	0.47
A09O	0.19	0.97	33.0	33.0	Natural	0.055	0.34	0.33	4.40	0.38	1	Tc (hrs)	0.08	1.32	1.03	0.82	0.70	0.62
												R (hrs)	0.06	1.25	0.95	0.74	0.62	0.54
A09P	0.18	0.94	30.9	30.9	Natural	0.053	0.35	0.35	4.65	0.32		Tc (hrs)	0.08	1.27	1.00	0.79	0.68	0.60
												R (hrs)	0.06	1.23	0.94	0.73	0.62	0.54
A09Q	0.22	0.82	46.3	46.3	Natural	0.054	0.33	0.30	4.15	0.44	2	Tc (hrs)	1.50	0.95	0.75	0.60	0.52	0.46
												R (hrs)	1.18	0.71	0.55	0.42	0.36	0.32
A09R	0.14	0.72	29.2	29.2	Natural	0.053	0.35	0.35	4.25	0.42		Tc (hrs)	0.08	1.16	0.88	0.69	0.59	0.52
												R (hrs)	0.05	1.02	0.74	0.57	0.48	0.42
A09S	0.07	0.38	36.8	36.8	Natural	0.057	0.35	0.35	4.80	0.30		Tc (hrs)	1.35	0.58	0.46	0.36	0.32	0.30
												R (hrs)	1.09	0.43	0.33	0.25	0.22	0.20

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 5 Hour Loss Method: Green/Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A09T	0.18	0.72	90.3	90.3	Natural	0.055	0.34	0.33	4.30	0.41	1	Tc (hrs)	1.50	0.65	0.50	0.39	0.34	0.31
												R (hrs)	1.18	0.46	0.35	0.27	0.23	0.21
A09U	0.17	0.68	482.4	300.0	Natural	0.053	0.35	0.34	4.20	0.43	19	Tc (hrs)	0.50	0.30	0.25	0.22	0.20	0.19
												R (hrs)	0.34	0.19	0.16	0.14	0.12	0.12
A10	0.21	0.50	74.0	74.0	Natural	0.051	0.34	0.35	4.65	0.32	1	Tc (hrs)	1.06	0.47	0.37	0.30	0.27	0.25
												R (hrs)	0.55	0.22	0.17	0.13	0.12	0.11
A10A	0.19	0.65	73.8	73.8	Natural	0.055	0.33	0.33	5.30	0.24	2	Tc (hrs)	1.07	0.56	0.46	0.37	0.33	0.30
												R (hrs)	0.73	0.36	0.29	0.22	0.20	0.18
A11	0.16	0.46	15.2	15.2	Natural	0.052	0.35	0.35	4.20	0.43		Tc (hrs)	0.08	1.11	0.84	0.66	0.56	0.50
												R (hrs)	0.04	0.63	0.46	0.35	0.30	0.26
A11A	0.59	1.90	67.4	67.4	Natural	0.046	0.35	0.35	5.10	0.26		Tc (hrs)	1.50	1.35	1.07	1.55	0.71	0.63
												R (hrs)	1.31	1.16	0.89	1.36	0.57	0.50
A11B	0.15	1.03	108.7	108.7	Natural	0.056	0.34	0.33	4.20	0.43	1	Tc (hrs)	1.50	0.81	0.62	0.49	0.43	0.38
												R (hrs)	1.78	0.90	0.67	0.52	0.44	0.39
A11C	0.12	0.49	16.3	16.3	Natural	0.054	0.35	0.35	3.85	0.52		Tc (hrs)	0.08	1.27	0.93	0.71	0.61	0.54
												R (hrs)	0.04	0.91	0.64	0.48	0.41	0.35
A11D	0.15	0.68	170.6	170.6	Natural	0.056	0.34	0.33	3.92	0.49	1	Tc (hrs)	1.41	0.48	0.36	0.28	0.25	0.24
												R (hrs)	1.19	0.36	0.26	0.20	0.18	0.17
A11E	0.30	1.04	109.6	109.6	Natural	0.050	0.34	0.34	4.20	0.43	5	Tc (hrs)	1.50	0.71	0.55	0.44	0.38	0.35
												R (hrs)	1.19	0.52	0.39	0.31	0.26	0.23
A11F	0.47	1.53	212.4	211.0	Natural	0.047	0.35	0.34	4.35	0.40	14	Tc (hrs)	1.05	0.60	0.49	0.40	0.35	0.32
												R (hrs)	0.85	0.46	0.36	0.29	0.25	0.23
A11G	0.07	0.39	256.4	243.0	Urban	0.062	0.32	0.29	4.55	0.35	22	Tc (hrs)	0.35	0.23	0.20	0.18	0.17	0.16
												R (hrs)	0.26	0.16	0.14	0.13	0.12	0.11
A11H	0.07	0.41	670.7	315.0	Natural	0.058	0.35	0.35	4.15	0.44		Tc (hrs)	0.77	0.25	0.20	0.18	0.16	0.15
												R (hrs)	0.61	0.17	0.14	0.12	0.11	0.10

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A11I	0.28	0.68	394.1	293.0	Natural	0.050	0.35	0.29	8.40	0.07	1	Tc (hrs)	0.35	0.24	0.22	0.20	0.19	0.18
												R (hrs)	0.17	0.12	0.11	0.09	0.09	0.08
A11J	0.08	0.47	46.8	46.8	Natural	0.058	0.35	0.26	8.80	0.06		Tc (hrs)	0.70	0.45	0.39	0.34	0.31	0.29
												R (hrs)	0.58	0.36	0.30	0.27	0.24	0.22
A11K	0.30	0.65	138.5	138.5	Natural	0.050	0.35	0.35	4.40	0.38	6	Tc (hrs)	0.90	0.43	0.34	0.27	0.25	0.23
												R (hrs)	0.47	0.20	0.16	0.12	0.11	0.10
A11L	0.25	0.67	44.8	44.8	Natural	0.050	0.35	0.19	11.20	0.02		Tc (hrs)	0.68	0.49	0.43	0.38	0.35	0.33
												R (hrs)	0.38	0.27	0.23	0.20	0.19	0.18
A11M	0.26	0.99	411.1	297.0	Natural	0.050	0.35	0.27	8.80	0.06	2	Tc (hrs)	0.44	0.30	0.27	0.24	0.23	0.21
												R (hrs)	0.32	0.21	0.18	0.16	0.15	0.14
A11N	0.08	0.59	628.8	315.0	Natural	0.056	0.35	0.39	6.20	0.17	1	Tc (hrs)	0.49	0.25	0.23	0.20	0.19	0.18
												R (hrs)	0.46	0.22	0.19	0.17	0.16	0.15
A11O	0.06	0.50	796.0	315.0	Natural	0.059	0.35	0.39	6.20	0.17	1	Tc (hrs)	0.45	0.24	0.21	0.19	0.18	0.17
												R (hrs)	0.44	0.22	0.20	0.17	0.16	0.15
A21A	0.08	0.58	302.1	263.0	Natural	0.037	0.15	0.35	4.60	0.33 *	38	Tc (hrs)	0.25	0.20	0.18	0.17	0.15	0.15
												R (hrs)	0.22	0.17	0.15	0.14	0.12	0.12
A21AA	0.01	0.13	31.0	31.0	Urban	0.030	0.24	0.14	10.10	0.04	37	Tc (hrs)	0.18	0.15	0.14	0.13	0.13	0.12
												R (hrs)	0.14	0.12	0.11	0.10	0.09	0.09
A21AB	0.04	0.26	12.0	12.0	Urban	0.015	0.10	0.15 *	9.70	0.07	78 *	Tc (hrs)	0.23	0.20	0.18	0.17	0.16	0.15
												R (hrs)	0.16	0.14	0.13	0.12	0.11	0.11
A21AC	0.02	0.20	30.0	30.0	Urban	0.017	0.10	0.16	8.80	0.07 *	72	Tc (hrs)	0.16	0.14	0.13	0.12	0.11	0.11
												R (hrs)	0.12	0.10	0.09	0.09	0.08	0.08
A21AD	0.05	0.41	15.0	15.0	Urban	0.021	0.24	0.16	8.80	0.07	37 *	Tc (hrs)	0.37	0.29	0.27	0.24	0.23	0.22
												R (hrs)	0.32	0.25	0.22	0.20	0.19	0.18
A21AE	0.05	0.24	29.0	29.0	Urban	0.021	0.23	0.18	7.00	0.13	34	Tc (hrs)	0.21	0.18	0.17	0.15	0.15	0.14
												R (hrs)	0.12	0.10	0.09	0.08	0.08	0.08

Sub Basin Data

Basin: A1 Storms: Multiple Duration: 6 Hours Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A21AF	0.00	0.10	40.0	40.0	Urban	0.035	0.24	0.26	4.80	0.35 *	37	Tc (hrs)	0.18	0.14	0.13	0.12	0.11	0.11
												R (hrs)	0.20	0.16	0.14	0.13	0.12	0.12
A21AG	0.03	0.23	30.0	30.0	Urban	0.023	0.23	0.27	5.60	0.24	35	Tc (hrs)	0.23	0.19	0.17	0.16	0.15	0.14
												R (hrs)	0.16	0.13	0.12	0.11	0.10	0.10
A21AH	0.03	0.21	33.0	33.0	Urban	0.025	0.23	0.26	4.90 *	0.33 *	36	Tc (hrs)	0.23	0.18	0.17	0.15	0.15	0.14
												R (hrs)	0.17	0.13	0.12	0.11	0.10	0.10
A21AI	0.01	0.12	33.0	33.0	Urban	0.032	0.24	0.26	4.80	0.35 *	37	Tc (hrs)	0.20	0.16	0.15	0.13	0.13	0.12
												R (hrs)	0.19	0.15	0.14	0.12	0.11	0.11
A21AJ	0.01	0.23	35.0	35.0	Urban	0.030	0.10 *	0.25 *	4.80	0.39 *	76 *	Tc (hrs)	0.23	0.20	0.18	0.17	0.16	0.15
												R (hrs)	0.29	0.25	0.23	0.21	0.19	0.18
A21AK	0.04	0.28	16.4	16.4	Urban	0.015	0.10	0.26	4.80	0.41	73	Tc (hrs)	0.23	0.19	0.18	0.16	0.15	0.15
												R (hrs)	0.15	0.13	0.12	0.11	0.10	0.10
A21B	0.02	0.40	887.5	315.0	Natural	0.121	0.15	0.35	4.50 *	0.35 *		Tc (hrs)	0.68	0.37	0.30	0.25	0.23	0.22
												R (hrs)	1.02	0.52	0.41	0.34	0.31	0.29
A21C	0.05	0.51	90.0	90.0	Urban	0.021	0.22	0.23	4.30	0.56 *	36	Tc (hrs)	0.27	0.20	0.18	0.16	0.15	0.15
												R (hrs)	0.27	0.19	0.17	0.15	0.14	0.14
A21D	0.02	0.19	315.0	268.0	Natural	0.053	0.15	0.35	3.95	0.47 *	65	Tc (hrs)	0.16	0.13	0.12	0.11	0.10	0.10
												R (hrs)	0.12	0.10	0.09	0.08	0.08	0.07
A21E	0.06	0.32	150.0	150.0	Urban	0.021	0.23	0.23	4.45	0.47 *	56 *	Tc (hrs)	0.15	0.13	0.12	0.11	0.10	0.10
												R (hrs)	0.09	0.08	0.07	0.06	0.06	0.06
A21F	0.05	0.30	315.0	268.0	Natural	0.043	0.15	0.35	3.95	0.47 *	65	Tc (hrs)	0.18	0.15	0.14	0.13	0.12	0.11
												R (hrs)	0.12	0.10	0.09	0.08	0.08	0.07
A21G	0.04	0.38	132.0	132.0	Urban	0.022	0.23	0.24	5.10	0.37 *	54	Tc (hrs)	0.18	0.15	0.14	0.13	0.12	0.11
												R (hrs)	0.16	0.13	0.12	0.11	0.10	0.09
A21H	0.01	0.12	67.0	67.0	Urban	0.031	0.19	0.13	6.80	0.16 *	55	Tc (hrs)	0.14	0.12	0.11	0.10	0.10	0.09
												R (hrs)	0.13	0.11	0.10	0.09	0.09	0.08

Sub Basin Data

Basin: [illegible] Storms: Multiple [illegible] Duration: 6 Hour [illegible] Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A21I	0.04	0.26	315.0	268.0	Natural	0.045	0.15	0.35	4.45	0.36 *	44	Tc (hrs)	0.18	0.15	0.13	0.12	0.11	0.11
												R (hrs)	0.12	0.10	0.09	0.08	0.07	0.07
A21J	0.11	0.50	36.0	36.0	Urban	0.017	0.24	0.25	4.90	0.37 *	46	Tc (hrs)	0.30	0.23	0.21	0.19	0.18	0.17
												R (hrs)	0.19	0.14	0.13	0.12	0.11	0.10
A21K	0.07	0.35	31.0	31.0	Urban	0.020	0.22	0.23	4.50	0.48 *	37	Tc (hrs)	0.30	0.22	0.20	0.18	0.17	0.16
												R (hrs)	0.19	0.14	0.12	0.11	0.10	0.10
A21L	0.03	0.36	25.0	25.0	Urban	0.025	0.23	0.24	4.70	0.39 *	39	Tc (hrs)	0.38	0.27	0.24	0.22	0.21	0.20
												R (hrs)	0.42	0.29	0.26	0.24	0.22	0.21
A21M	0.02	0.41	7.0	7.0	Urban	0.028	0.23	0.23	4.70	0.38 *	44	Tc (hrs)	0.74	0.55	0.49	0.42	0.38	0.36
												R (hrs)	1.37	0.99	0.86	0.73	0.66	0.61
A21N	0.26	0.71	28.0	28.0	Urban	0.013	0.22	0.24	4.65	0.44 *	36	Tc (hrs)	0.38	0.27	0.24	0.21	0.20	0.19
												R (hrs)	0.21	0.14	0.12	0.11	0.10	0.10
A21O	0.01	0.16	12.0	12.0	Urban	0.019	0.08	0.19 *	4.80	0.42 *	76	Tc (hrs)	0.21	0.18	0.17	0.15	0.15	0.14
												R (hrs)	0.20	0.17	0.15	0.14	0.13	0.12
A21P	0.04	0.40	12.0	12.0	Urban	0.023	0.22	0.14 *	7.60	0.12 *	46	Tc (hrs)	0.43	0.34	0.30	0.28	0.25	0.24
												R (hrs)	0.47	0.36	0.32	0.29	0.26	0.25
A21Q	0.04	0.82	43.0	43.0	Urban	0.022	0.24	0.24	4.70 *	0.38 *	41	Tc (hrs)	0.47	0.35	0.30	0.27	0.25	0.23
												R (hrs)	0.82	0.58	0.51	0.44	0.40	0.38
A21R	0.01	0.15	20.0	20.0	Urban	0.031	0.22	0.22	4.80	0.36 *	48	Tc (hrs)	0.25	0.20	0.18	0.17	0.16	0.15
												R (hrs)	0.27	0.21	0.19	0.17	0.16	0.16
A21S	0.02	0.23	22.0	22.0	Urban	0.028	0.23	0.23	4.70	0.38 *	44	Tc (hrs)	0.30	0.23	0.21	0.19	0.18	0.17
												R (hrs)	0.33	0.25	0.23	0.20	0.19	0.18
A21T	0.04	0.31	23.0	23.0	Urban	0.022	0.21	0.22	4.90	0.33 *	48	Tc (hrs)	0.29	0.23	0.21	0.19	0.18	0.18
												R (hrs)	0.23	0.18	0.17	0.15	0.14	0.14
A21U	0.15	0.62	16.0	16.0	Urban	0.016	0.22	0.23	4.70	0.42 *	35 *	Tc (hrs)	0.50	0.36	0.31	0.27	0.25	0.24
												R (hrs)	0.35	0.24	0.21	0.18	0.16	0.15

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A21V	0.04	0.31	26.0	26.0	Urban	0.014	0.19	0.14	8.40 *	0.12 *	7	Tc (hrs)	0.20	0.17	0.16	0.15	0.14	0.13
												R (hrs)	0.16	0.13	0.12	0.11	0.11	0.10
A21W	0.02	0.41	22.0	22.0	Urban	0.016	0.20	0.25	4.70	0.51 *	2	Tc (hrs)	0.60	0.28	0.23	0.20	0.19	0.18
												R (hrs)	1.02	0.43	0.36	0.31	0.29	0.27
A21X	0.02	0.56	29.0	29.0	Urban	0.015	0.20	0.25	5.70	0.33 *	2	Tc (hrs)	0.47	0.27	0.23	0.21	0.19	0.18
												R (hrs)	0.84	0.45	0.39	0.34	0.31	0.30
A21Y	0.05	0.39	38.0	38.0	Urban	0.027	0.23	0.16	8.00	0.10	32	Tc (hrs)	0.29	0.24	0.22	0.20	0.19	0.18
												R (hrs)	0.25	0.19	0.18	0.17	0.15	0.15
A21Z	0.07	0.44	34.0	34.0	Urban	0.020	0.22	0.26	6.20	0.18	32	Tc (hrs)	0.30	0.23	0.21	0.19	0.18	0.18
												R (hrs)	0.24	0.18	0.16	0.15	0.14	0.13
A99	0.14	0.66	16.7	16.7	Natural	0.028	0.10	0.35	2.64	1.11	5	Tc (hrs)	1.50	1.06	0.75	0.56	0.48	0.43
												R (hrs)	1.30	0.89	0.60	0.44	0.37	0.33
A99A	0.13	0.29	34.5	34.5	Natural	0.030	0.08	0.23	2.71	1.02	36	Tc (hrs)	0.38	0.26	0.23	0.20	0.19	0.18
												R (hrs)	0.15	0.10	0.09	0.08	0.07	0.07
A99B	0.05	0.20	50.0	50.0	Natural	0.031	0.10	0.35	3.31	0.68	5	Tc (hrs)	0.46	0.21	0.18	0.16	0.15	0.14
												R (hrs)	0.23	0.10	0.09	0.07	0.07	0.06
A99C	0.03	0.02	450.0	315.0	Natural	0.032	0.10	0.35	2.63	1.12	5	Tc (hrs)	0.10	0.08	0.08	0.08	0.08	0.08
												R (hrs)	0.01	0.01	0.01	0.01	0.01	0.01
A99D	0.03	0.02	450.0	315.0	Natural	0.032	0.10	0.35	3.50	0.59	5	Tc (hrs)	0.08	0.08	0.08	0.08	0.08	0.08
												R (hrs)	0.01	0.01	0.01	0.01	0.01	0.01
A99E	0.02	0.04	350.0	278.0	Natural	0.033	0.10	0.35	3.64	0.54	5	Tc (hrs)	0.08	0.08	0.08	0.08	0.08	0.08
												R (hrs)	0.02	0.02	0.02	0.02	0.02	0.02
A99F	0.11	0.69	5.8	5.8	Natural	0.054	0.35	0.35	2.92	0.98		Tc (hrs)	1.50	1.50	1.50	1.50	1.50	1.36
												R (hrs)	1.50	1.50	1.50	1.50	1.50	1.35
A99G	0.02	0.02	450.0	315.0	Natural	0.064	0.35	0.35	3.45	0.67		Tc (hrs)	0.23	0.08	0.08	0.08	0.08	0.08
												R (hrs)	0.03	0.01	0.01	0.01	0.01	0.01

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green/Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A99H	0.10	0.73	9.6	9.6	Natural	0.058	0.35	0.34	2.86	1.05		Tc (hrs)	1.50	1.50	1.50	1.50	1.36	1.19
												R (hrs)	1.67	1.67	1.67	1.67	1.50	1.29
A99I	0.14	0.62	59.7	59.7	Urban	0.052	0.23	0.26	4.30	0.47	37	Tc (hrs)	0.68	0.48	0.42	0.36	0.33	0.30
												R (hrs)	0.50	0.34	0.29	0.24	0.22	0.20
A99J	0.14	0.85	50.6	50.6	Urban	0.047	0.19	0.25	4.25	0.51	51	Tc (hrs)	0.75	0.57	0.50	0.44	0.40	0.37
												R (hrs)	0.73	0.54	0.47	0.41	0.37	0.34
A99K	0.11	0.71	95.8	95.8	Urban	0.046	0.17	0.27	4.30	0.50	46	Tc (hrs)	0.51	0.38	0.34	0.29	0.27	0.25
												R (hrs)	0.48	0.35	0.30	0.26	0.23	0.22
A99L	0.08	0.26	219.2	217.0	Urban	0.052	0.21	0.26	3.95	0.59	44	Tc (hrs)	0.22	0.17	0.15	0.14	0.13	0.13
												R (hrs)	0.10	0.08	0.07	0.06	0.06	0.05
A99M	0.06	0.35	168.6	168.6	Urban	0.041	0.14	0.27	4.30	0.55	67	Tc (hrs)	0.22	0.18	0.17	0.15	0.14	0.14
												R (hrs)	0.15	0.12	0.11	0.10	0.09	0.09
A99N	0.16	0.70	44.3	44.3	Urban	0.053	0.21	0.24	6.20	0.21	45	Tc (hrs)	0.72	0.55	0.49	0.43	0.39	0.37
												R (hrs)	0.55	0.41	0.36	0.31	0.28	0.26
A99O	0.10	0.27	44.4	44.4	Urban	0.062	0.29	0.29	5.00	0.30	27	Tc (hrs)	0.52	0.35	0.30	0.26	0.24	0.23
												R (hrs)	0.23	0.15	0.13	0.11	0.10	0.09
A99P	0.58	1.34	56.7	56.7	Urban	0.049	0.25	0.28	5.40	0.26	27	Tc (hrs)	1.21	0.86	0.74	0.62	0.55	0.51
												R (hrs)	0.79	0.54	0.46	0.38	0.33	0.30
A99Q	0.12	0.06	83.3	83.3	Natural	0.054	0.35	0.35	3.67	0.58		Tc (hrs)	0.54	0.14	0.12	0.10	0.09	0.09
												R (hrs)	0.07	0.02	0.01	0.01	0.01	0.01
A99R	0.04	0.19	36.8	36.8	Urban	0.065	0.31	0.31	3.55	0.66	12	Tc (hrs)	0.80	0.41	0.32	0.25	0.23	0.22
												R (hrs)	0.50	0.24	0.18	0.14	0.13	0.12
A99S	0.08	0.56	17.9	17.9	Natural	0.057	0.35	0.35	3.64	0.59		Tc (hrs)	1.50	1.50	1.07	0.81	0.70	0.61
												R (hrs)	1.57	1.57	1.08	0.80	0.67	0.58
A99T	0.03	0.07	28.6	28.6	Natural	0.066	0.34	0.34	2.79	1.13	3	Tc (hrs)	1.02	0.42	0.24	0.19	0.17	0.15
												R (hrs)	0.33	0.12	0.07	0.05	0.05	0.04

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
A99U	0.07	0.57	61.4	61.4	Natural	0.057	0.35	0.35	3.71	0.56		Tc (hrs)	0.08	0.80	0.57	0.44	0.38	0.33
												R (hrs)	0.07	0.84	0.58	0.43	0.36	0.32
A99V	0.21	0.78	56.4	56.4	Natural	0.051	0.35	0.40	6.00	0.18		Tc (hrs)	1.44	0.71	0.58	0.45	0.40	0.37
												R (hrs)	1.11	0.51	0.40	0.31	0.27	0.25
A99W	0.22	0.63	11.1	11.1	Urban	0.054	0.29	0.30	6.40	0.17	15	Tc (hrs)	1.50	1.16	0.98	0.80	0.71	0.65
												R (hrs)	0.96	0.72	0.60	0.48	0.42	0.38
A99X	0.26	0.61	57.4	57.4	Urban	0.036	0.21	0.28	4.20	0.53	39	Tc (hrs)	0.53	0.38	0.33	0.28	0.26	0.24
												R (hrs)	0.26	0.18	0.16	0.13	0.12	0.11
A99Y	0.32	1.01	37.6	37.6	Natural	0.048	0.35	0.35	4.35	0.40		Tc (hrs)	0.08	1.22	0.93	0.73	0.63	0.55
												R (hrs)	0.05	0.89	0.66	0.51	0.43	0.37
A99Z	0.16	0.85	411.8	297.0	Natural	0.100	0.50		4.40	0.58	4	Tc (hrs)	0.70	0.47	0.40	0.35	0.32	0.30
												R (hrs)	0.64	0.40	0.34	0.29	0.27	0.25
N01	0.65	1.65	29.1	29.1	Urban	0.026	0.13	0.29	4.00	0.54	37	Tc (hrs)	1.17	0.85	0.74	0.63	0.57	0.52
												R (hrs)	0.84	0.59	0.51	0.42	0.38	0.34
N01A	0.41	0.97	14.4	14.4	Natural	0.025	0.10	0.35	3.17	0.76	6	Tc (hrs)	1.50	1.10	0.85	0.68	0.59	0.53
												R (hrs)	0.94	0.66	0.50	0.39	0.34	0.29
N02	0.76	1.58	24.7	24.7	Natural	0.038	0.16	0.26	5.10	0.26	15	Tc (hrs)	1.50	1.28	1.06	0.86	0.77	0.70
												R (hrs)	0.98	0.82	0.67	0.53	0.47	0.42
N02A	0.18	0.81	33.3	33.3	Natural	0.030	0.11	0.33	4.35	0.39	21	Tc (hrs)	0.79	0.54	0.46	0.38	0.35	0.32
												R (hrs)	0.64	0.42	0.35	0.29	0.26	0.24
N02B	0.15	0.71	28.2	28.2	Urban	0.081	0.39	0.08	4.50	0.52	19	Tc (hrs)	1.50	1.12	0.95	0.80	1.56	0.64
												R (hrs)	1.29	0.94	0.78	0.64	1.35	0.50
N03	0.60	1.46	14.4	14.4	Urban	0.055	0.24	0.18	4.20	0.49	25	Tc (hrs)	1.50	1.50	1.50	1.44	1.27	1.15
												R (hrs)	1.05	1.05	1.05	1.00	0.87	0.78
N03A	0.39	1.32	15.2	15.2	Urban	0.049	0.23	0.26	4.50	0.40	31	Tc (hrs)	1.50	1.50	1.34	1.13	1.01	0.92
												R (hrs)	1.24	1.24	1.09	0.91	0.80	0.72

Sub Basin Data

Basin: 03 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N03B	0.63	1.30	22.3	22.3	Urban	0.074	0.39	0.07	8.40	0.10	9	Tc (hrs)	1.50	1.50	1.40	1.17	1.05	0.96
												R (hrs)	0.93	0.93	0.86	0.71	0.63	0.57
N04	0.83	1.53	22.2	22.2	Urban	0.043	0.19	0.26	6.00	0.20	39	Tc (hrs)	1.50	1.23	1.05	0.90	0.81	0.75
												R (hrs)	0.91	0.73	0.62	0.51	0.46	0.42
N04A	0.07	0.60	21.7	21.7	Urban	0.050	0.19	0.25	4.30	0.51	55	Tc (hrs)	0.85	0.66	0.59	0.51	0.47	0.43
												R (hrs)	0.96	0.73	0.64	0.54	0.49	0.45
N05	0.28	1.08	22.2	22.2	Urban	0.049	0.15	0.14	4.30	0.47	57	Tc (hrs)	1.19	0.93	0.83	0.73	0.67	0.62
												R (hrs)	0.99	0.76	0.67	0.58	0.53	0.48
N05A	0.17	0.61	23.0	23.0	Urban	0.051	0.20	0.26	4.55	0.42	44	Tc (hrs)	0.91	0.69	0.60	0.52	0.47	0.44
												R (hrs)	0.61	0.45	0.39	0.33	0.29	0.27
N05B	0.31	1.68	14.9	14.9	Urban	0.046	0.23	0.25	4.90	0.36	38	Tc (hrs)	1.50	1.50	1.47	1.25	1.13	1.02
												R (hrs)	1.70	1.70	1.66	1.39	1.24	1.11
N05C	0.28	0.99	16.2	16.2	Urban	0.044	0.23	0.25	5.30	0.31	29	Tc (hrs)	1.50	1.09	0.94	0.80	0.71	0.65
												R (hrs)	1.20	0.84	0.71	0.60	0.52	0.47
N06	0.59	1.14	25.4	25.4	Urban	0.044	0.17	0.21	4.25	0.45	39	Tc (hrs)	1.28	0.95	0.84	0.72	0.65	0.60
												R (hrs)	0.73	0.53	0.45	0.38	0.34	0.31
N07	0.75	1.38	30.4	30.4	Urban	0.051	0.23	0.21	4.55	0.41	33	Tc (hrs)	1.50	1.22	1.05	0.88	0.79	0.72
												R (hrs)	0.89	0.70	0.60	0.49	0.44	0.39
N07A	0.36	0.61	26.2	26.2	Urban	0.052	0.24	0.24	4.65	0.37	37	Tc (hrs)	0.91	0.68	0.59	0.50	0.45	0.42
												R (hrs)	0.41	0.29	0.25	0.21	0.19	0.17
N08	0.79	1.90	20.0	20.0	Urban	0.030	0.10	0.27	4.25	0.47	47	Tc (hrs)	1.50	1.15	1.01	0.88	0.79	0.73
												R (hrs)	1.11	0.83	0.72	0.61	0.55	0.50
N08A	0.74	1.71	18.1	18.1	Urban	0.048	0.20	0.23	4.40	0.50	51	Tc (hrs)	1.50	1.50	1.38	1.19	1.08	0.98
												R (hrs)	1.06	1.06	0.97	0.82	0.73	0.67
N08B	0.70	1.59	15.1	15.1	Urban	0.043	0.23	0.23	6.20	0.20	36	Tc (hrs)	1.50	1.50	1.30	1.54	0.99	0.91
												R (hrs)	1.03	1.03	0.88	1.06	0.65	0.59

Sub Basin Data

Basin: [illegible] Storms: Multiple Duration: 6 Hour Loss Method: Green Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N09	0.65	1.35	26.7	26.7	Urban	0.040	0.17	0.21	4.65	0.36	56	Tc (hrs)	1.14	0.90	0.80	0.70	0.64	0.59
												R (hrs)	0.69	0.53	0.47	0.40	0.37	0.34
N10	0.49	1.36	17.6	17.6	Urban	0.042	0.21	0.27	5.60	0.25	36	Tc (hrs)	1.50	1.22	1.06	0.90	0.81	0.75
												R (hrs)	1.11	0.89	0.76	0.63	0.56	0.51
N11	0.90	1.52	17.1	17.1	Urban	0.039	0.18	0.21	7.00	0.13	35	Tc (hrs)	1.50	1.22	1.05	0.91	0.83	0.77
												R (hrs)	0.86	0.69	0.58	0.49	0.44	0.41
N11C	0.26	0.82	24.4	24.4	Urban	0.047	0.22	0.27	4.45	0.41	24	Tc (hrs)	1.29	0.88	0.75	0.63	0.56	0.51
												R (hrs)	0.91	0.60	0.50	0.41	0.36	0.33
N11D	0.51	1.47	20.4	20.4	Urban	0.031	0.13	0.33	4.60	0.30	14	Tc (hrs)	1.50	1.11	0.94	0.77	0.68	0.62
												R (hrs)	1.16	0.83	0.69	0.55	0.48	0.43
N11E	0.49	1.16	24.1	24.1	Urban	0.046	0.25	0.25	5.80	0.22	30	Tc (hrs)	1.40	1.02	0.89	0.75	0.67	0.62
												R (hrs)	0.91	0.64	0.55	0.45	0.40	0.37
N11F	0.24	0.60	30.0	30.0	Natural	0.050	0.35	0.35	4.45	0.37		Tc (hrs)	1.50	0.90	0.69	0.54	0.47	0.42
												R (hrs)	0.86	0.49	0.37	0.28	0.24	0.21
N11G	0.52	1.06	32.1	32.1	Natural	0.045	0.35	0.35	4.35	0.40		Tc (hrs)	0.08	1.33	1.00	0.78	0.68	0.59
												R (hrs)	0.04	0.77	0.56	0.43	0.36	0.31
N11H	0.44	1.04	31.7	31.7	Natural	0.046	0.35	0.35	4.50	0.36		Tc (hrs)	0.08	1.27	0.98	0.77	0.66	0.58
												R (hrs)	0.04	0.80	0.59	0.46	0.39	0.34
N11I	0.62	1.04	31.7	31.7	Urban	0.047	0.25	0.26	5.80	0.22	24	Tc (hrs)	1.27	0.90	0.77	0.64	0.58	0.53
												R (hrs)	0.65	0.45	0.38	0.31	0.27	0.25
N11J	0.24	0.56	35.7	35.7	Urban	0.054	0.30	0.25	4.10	0.49	10	Tc (hrs)	1.29	0.72	0.59	0.48	0.42	0.38
												R (hrs)	0.69	0.36	0.29	0.23	0.20	0.18
N11K	0.19	0.64	32.8	32.8	Urban	0.057	0.29	0.29	4.25	0.44	12	Tc (hrs)	1.48	0.85	0.70	0.57	0.50	0.45
												R (hrs)	1.04	0.56	0.46	0.36	0.32	0.28
N11L	0.29	0.64	41.9	41.9	Urban	0.054	0.01	0.33	2.65	1.28	3	Tc (hrs)	1.00	1.33	0.88	0.64	0.54	0.48
												R (hrs)	0.52	0.72	0.45	0.32	0.27	0.23

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N11M	0.10	0.35	48.6	48.6	Natural	0.055	0.35	0.35	4.15	0.44		Tc (hrs)	1.50	0.53	1.58	0.31	0.27	0.25
												R (hrs)	0.93	0.29	0.98	0.16	0.14	0.13
N11N	0.27	0.76	551.3	309.0	Urban	0.055	0.33	0.31	4.45	0.38	5	Tc (hrs)	0.70	0.34	0.27	0.23	0.22	0.20
												R (hrs)	0.42	0.19	0.15	0.13	0.12	0.11
N11O	0.05	0.33	51.5	51.5	Natural	0.059	0.35	0.35	4.50	0.36		Tc (hrs)	1.25	0.48	0.37	0.29	0.26	0.25
												R (hrs)	1.03	0.36	0.27	0.21	0.18	0.17
N11P	0.38	1.01	428.7	298.0	Natural	0.049	0.02	0.35	2.65	1.21	1	Tc (hrs)	1.00	0.70	0.45	0.32	0.27	0.25
												R (hrs)	0.65	0.43	0.26	0.18	0.15	0.14
N12	0.51	1.39	7.2	7.2	Urban	0.040	0.16	0.25	5.40	0.24	41	Tc (hrs)	1.50	1.50	1.50	1.30	1.17	1.08
												R (hrs)	1.11	1.11	1.11	0.95	0.84	0.77
N13	0.50	5.15	16.7	16.7	Urban	0.053	0.12	0.23	4.70	0.43	71	Tc (hrs)	1.50	1.50	1.50	1.50	1.50	1.50
												R (hrs)	3.21	3.21	3.21	3.21	3.21	3.21
N14	0.08	0.63	41.3	41.3	Urban	0.031	0.06	0.15	3.88	0.60	88	Tc (hrs)	0.40	0.33	0.30	0.27	0.25	0.24
												R (hrs)	0.39	0.32	0.29	0.26	0.24	0.23
N14A	0.44	1.37	13.1	13.1	Urban	0.044	0.22	0.26	5.60	0.25	35	Tc (hrs)	1.50	1.47	1.28	1.08	0.97	0.89
												R (hrs)	1.19	1.16	0.99	0.82	0.73	0.66
N15	0.54	1.50	14.7	14.7	Urban	0.043	0.20	0.25	5.10	0.30	34	Tc (hrs)	1.50	1.50	1.30	1.10	0.98	0.90
												R (hrs)	1.14	1.14	0.97	0.81	0.71	0.65
N15A	0.80	1.63	15.3	15.3	Urban	0.040	0.22	0.16	7.30	0.13	28	Tc (hrs)	1.50	1.40	1.20	1.02	0.93	0.86
												R (hrs)	0.98	0.90	0.76	0.64	0.57	0.53
N15B	0.75	1.65	26.1	26.1	Urban	0.051	0.24	0.24	5.80	0.23	26	Tc (hrs)	1.50	1.50	1.28	1.05	0.94	0.86
												R (hrs)	1.02	1.02	0.85	0.69	0.61	0.55
N16	0.92	1.47	24.5	24.5	Urban	0.046	0.22	0.24	5.10	0.31	33	Tc (hrs)	1.50	1.31	1.13	0.94	0.84	0.77
												R (hrs)	0.83	0.71	0.60	0.49	0.44	0.39
N17	0.42	1.41	28.4	28.4	Urban	0.037	0.13	0.31	4.60	0.35	24	Tc (hrs)	1.42	1.00	1.55	0.72	0.64	0.59
												R (hrs)	1.19	0.80	1.31	0.56	0.49	0.45

Sub Basin Data

Basin: 0 Storms: Multiple Duration: 6 Hour Loss Method: Green Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N18	0.50	1.15	28.7	28.7	Urban	0.044	0.20	0.29	5.10	0.29	21	Tc (hrs)	1.51	0.98	0.84	0.70	0.63	0.57
												R (hrs)	0.97	0.60	0.51	0.42	0.36	0.33
N19A	0.47	1.16	101.7	101.7	Natural	0.086	0.16	0.34	4.90	0.28 *	32	Tc (hrs)	1.18	0.87	0.75	0.64	0.58	0.53
												R (hrs)	0.78	0.55	0.47	0.39	0.35	0.32
N19B	0.32	0.86	159.3	159.3	Urban	0.052	0.33	0.30	4.60	0.34	20	Tc (hrs)	0.68	0.43	0.36	0.30	0.28	0.25
												R (hrs)	0.41	0.25	0.21	0.17	0.15	0.14
N19C	0.76	1.14	101.8	101.8	Urban	0.048	0.31	0.31	4.55	0.37	23	Tc (hrs)	1.01	0.66	0.56	0.46	0.41	0.38
												R (hrs)	0.49	0.31	0.25	0.21	0.18	0.16
N19D	0.39	1.41	68.8	68.8	Natural	0.047	0.35	0.35	4.20	0.43	27	Tc (hrs)	1.30	0.86	0.73	0.61	0.54	0.49
												R (hrs)	1.11	0.70	0.58	0.48	0.42	0.38
N19E	0.70	1.24	14.5	14.5	Natural	0.044	0.35	0.35	4.45	0.37	19	Tc (hrs)	1.50	1.50	1.42	1.17	1.02	0.91
												R (hrs)	0.84	0.84	0.79	0.64	0.55	0.48
N19F	0.37	1.24	17.7	17.7	Natural	0.047	0.35	0.35	4.70	0.31	1	Tc (hrs)	1.50	1.50	1.47	1.17	1.00	0.88
												R (hrs)	1.21	1.21	1.18	0.91	0.77	0.67
N20	0.36	1.15	20.0	20.0	Urban	0.048	0.17	0.17	4.70	0.33	33	Tc (hrs)	1.48	1.11	0.97	0.82	0.74	0.68
												R (hrs)	1.15	0.84	0.72	0.60	0.53	0.49
N21	0.62	1.29	17.1	17.1	Urban	0.057	0.26	0.22	4.60	0.39	31	Tc (hrs)	1.50	1.50	1.42	1.20	1.06	0.96
												R (hrs)	0.93	0.93	0.88	0.73	0.63	0.57
N21A1	0.02	0.29	29.1	29.1	Urban	0.063	0.24	0.37	5.30	0.28	28	Tc (hrs)	0.67	0.46	0.39	0.33	0.30	0.28
												R (hrs)	0.78	0.51	0.43	0.36	0.32	0.30
N21A10	0.05	0.33	27.9	27.9	Urban	0.060	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.85	0.68	0.55	0.44	0.38	0.35
												R (hrs)	0.75	0.59	0.46	0.36	0.31	0.28
N21A11	0.02	0.24	39.3	39.3	Urban	0.112	0.22	0.35	2.65	1.74	10	Tc (hrs)	1.50	1.38	1.00	0.65	0.53	0.45
												R (hrs)	2.04	1.86	1.30	0.81	0.64	0.54
N21A12	0.01	0.26	20.3	20.3	Urban	0.067	0.25	0.35	2.65	1.40	30	Tc (hrs)	1.55	0.71	0.58	0.46	0.41	0.37
												R (hrs)	2.45	1.03	0.82	0.64	0.56	0.49

* Non default value

Sub Basin Data

Basin [illegible] Storms: Multiple [illegible] Duration: 6 Hour [illegible] Loss Method: Green-Ampt [illegible] Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N21A13	0.02	0.23	23.5	23.5	Urban	0.065	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.75	0.60	0.49	0.39	0.34	0.31
												R (hrs)	0.76	0.59	0.47	0.36	0.31	0.28
N21A14	0.06	0.36	18.6	18.6	Urban	0.094	0.19	0.35	2.65	1.72	9	Tc (hrs)	1.50	1.50	1.50	1.10	0.89	0.77
												R (hrs)	1.25	1.25	1.25	0.89	0.70	0.60
N21A15	0.02	0.22	35.7	35.7	Urban	0.083	0.24	0.35	2.65	1.50	24	Tc (hrs)	0.82	0.66	0.52	0.40	0.35	0.31
												R (hrs)	0.98	0.78	0.59	0.44	0.38	0.33
N21A16	0.02	0.31	22.2	22.2	Urban	0.064	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.93	1.56	0.61	0.48	0.43	0.39
												R (hrs)	1.16	2.07	0.73	0.56	0.49	0.44
N21A17	0.01	0.28	32.7	32.7	Urban	0.100	0.23	0.35	2.65	1.61	18	Tc (hrs)	1.35	1.09	0.85	0.63	0.53	0.47
												R (hrs)	2.46	1.94	1.48	1.05	0.86	0.76
N21A18	0.03	0.29	17.1	17.1	Urban	0.063	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.98	0.79	0.65	0.51	0.45	0.41
												R (hrs)	1.08	0.85	0.68	0.53	0.46	0.41
N21A19	0.01	0.11	14.3	14.3	Urban	0.072	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.60	0.48	0.39	0.31	0.27	0.25
												R (hrs)	0.64	0.50	0.40	0.31	0.26	0.24
N21A2	0.01	0.17	18.0	18.0	Urban	0.070	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.72	1.57	0.47	0.37	0.33	0.29
												R (hrs)	0.90	2.14	0.56	0.43	0.37	0.33
N21A20	0.00	0.13	33.3	33.3	Urban	0.121	0.22	0.35	2.65	1.69	13	Tc (hrs)	1.05	0.87	1.57	0.44	0.36	0.32
												R (hrs)	2.04	1.66	3.19	0.78	0.63	0.54
N21A21	0.02	0.17	13.3	13.3	Urban	0.064	0.22	0.35	2.65	1.36	51	Tc (hrs)	0.59	0.48	0.41	0.35	0.32	0.29
												R (hrs)	0.51	0.41	0.35	0.29	0.26	0.24
N21A22	0.01	0.39	42.6	42.6	Urban	0.071	0.05	0.35	2.65	1.80	95	Tc (hrs)	0.49	0.42	0.38	0.34	0.32	0.30
												R (hrs)	1.33	1.11	1.00	0.89	0.83	0.77
N21A23	0.03	0.33	21.3	21.3	Urban	0.063	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.98	0.79	0.64	0.51	0.45	0.41
												R (hrs)	1.18	0.93	0.74	0.58	0.50	0.45
N21A24	0.02	0.24	35.0	35.0	Urban	0.066	4.00 *	0.35	2.65	1.40	30	Tc (hrs)	0.66	0.55	0.50	0.45	0.43	0.40
												R (hrs)	0.74	0.61	0.55	0.49	0.46	0.43

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N21A25	0.00	0.12	51.7	51.7	Urban	0.038	0.10	0.35	2.65	1.70	80	Tc (hrs)	0.17	0.15	0.14	0.13	0.12	0.11
												R (hrs)	0.22	0.19	0.18	0.16	0.15	0.14
N21A26	0.03	0.35	24.0	24.0	Urban	0.063	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.96	0.78	0.64	0.50	0.45	0.40
												R (hrs)	1.23	0.97	0.78	0.60	0.52	0.47
N21A27	0.00	0.14	65.7	65.7	Urban	0.140	0.20	0.29	2.65	1.90		Tc (hrs)	1.00	1.00	1.10	0.48	0.36	0.30
												R (hrs)	1.76	1.76	1.96	0.78	0.57	0.46
N21A28	0.01	0.28	15.7	15.7	Urban	0.135	0.20	0.35	2.65	1.90		Tc (hrs)	1.50	1.50	1.50	1.50	1.35	1.10
												R (hrs)	3.88	3.88	3.88	3.88	3.44	2.74
N21A29	0.02	0.38	26.5	26.5	Urban	0.066	0.25	0.35	2.65	1.40	30	Tc (hrs)	1.01	0.82	0.67	0.53	0.47	0.43
												R (hrs)	1.76	1.39	1.11	0.86	0.75	0.68
N21A3	0.02	0.29	35.3	35.3	Urban	0.068	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.77	0.61	0.50	0.40	0.35	0.31
												R (hrs)	1.09	0.85	0.67	0.52	0.45	0.40
N21A30	0.02	0.33	27.4	27.4	Urban	0.064	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.89	0.72	0.58	0.46	0.41	0.37
												R (hrs)	1.12	0.88	0.70	0.54	0.47	0.42
N21A31	0.02	0.22	29.8	29.8	Urban	0.066	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.67	0.53	0.43	0.34	0.30	0.27
												R (hrs)	0.71	0.55	0.44	0.34	0.29	0.26
N21A32	0.00	0.15	61.6	61.6	Urban	0.140	0.20	0.35	2.65	1.90		Tc (hrs)	1.50	1.50	1.50	0.59	0.43	0.34
												R (hrs)	2.90	2.90	2.90	1.03	0.72	0.56
N21A33	0.04	0.41	20.6	20.6	Urban	0.059	0.24	0.35	2.65	1.38	28	Tc (hrs)	1.15	0.90	0.74	0.58	0.51	0.46
												R (hrs)	1.35	1.03	0.83	0.64	0.55	0.49
N21A34	0.02	0.24	35.7	35.7	Urban	0.066	0.25	0.29	2.65	1.40	30	Tc (hrs)	0.66	0.50	0.41	0.33	0.29	0.26
												R (hrs)	0.79	0.59	0.46	0.36	0.31	0.28
N21A35	0.01	0.19	41.4	41.4	Urban	0.068	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.54	0.43	0.35	0.27	0.24	0.23
												R (hrs)	0.62	0.48	0.38	0.29	0.25	0.23
N21A36	0.02	0.23	29.7	29.7	Urban	0.066	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.69	0.55	0.45	0.35	0.31	0.28
												R (hrs)	0.80	0.62	0.49	0.38	0.33	0.29

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N21A37	0.01	0.19	23.3	23.3	Urban	0.067	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.68	0.54	0.44	0.35	0.30	0.28
												R (hrs)	0.76	0.59	0.46	0.36	0.31	0.28
N21A38	0.02	0.31	31.7	31.7	Urban	0.074	0.24	0.35	2.65	1.46	27	Tc (hrs)	0.93	0.76	0.61	0.48	0.42	0.38
												R (hrs)	1.15	0.91	0.72	0.55	0.48	0.42
N21A39	0.01	0.51	20.2	20.2	Urban	0.069	0.05	0.35	2.65	1.80	95	Tc (hrs)	0.79	0.66	0.60	0.54	0.50	1.58
												R (hrs)	2.29	1.88	1.69	1.49	1.37	4.90
N21A4	0.01	0.18	31.3	31.3	Urban	0.070	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.60	0.48	0.38	0.30	0.27	0.24
												R (hrs)	0.77	0.60	0.47	0.37	0.32	0.28
N21A40	0.05	0.44	29.4	29.4	Urban	0.072	0.24	0.35	2.65	1.48	25	Tc (hrs)	1.28	1.01	0.82	0.64	0.55	0.50
												R (hrs)	1.35	1.04	0.83	0.62	0.53	0.48
N21A41	0.03	0.33	18.4	18.4	Urban	0.063	0.25	0.35	2.65	1.40	30	Tc (hrs)	1.04	0.84	0.69	0.55	0.48	0.43
												R (hrs)	1.21	0.95	0.77	0.59	0.51	0.46
N21A42	0.02	0.26	13.2	13.2	Urban	0.065	0.25	0.35	2.65	1.40	30	Tc (hrs)	1.04	0.84	0.69	0.55	0.48	0.43
												R (hrs)	1.18	0.93	0.75	0.58	0.50	0.45
N21A43	0.00	0.10	59.8	59.8	Urban	0.120	0.22	0.35	2.65	1.70	12	Tc (hrs)	0.71	0.60	0.43	0.28	0.23	0.21
												R (hrs)	0.95	0.78	0.54	0.34	0.28	0.25
N21A44	0.03	0.26	15.4	15.4	Urban	0.060	0.21	0.35	2.65	1.34	53	Tc (hrs)	0.69	0.56	0.48	0.42	0.38	0.35
												R (hrs)	0.68	0.54	0.46	0.39	0.35	0.32
N21A5	0.01	0.23	21.6	21.6	Urban	0.103	0.20	0.35	2.65	1.62	11	Tc (hrs)	1.50	1.50	1.06	0.73	0.60	0.53
												R (hrs)	2.49	2.49	1.70	1.12	0.91	0.78
N21A6	0.02	0.24	34.5	34.5	Urban	0.065	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.66	0.53	0.43	0.34	0.30	0.27
												R (hrs)	0.68	0.53	0.42	0.32	0.28	0.25
N21A7	0.01	0.23	48.7	48.7	Urban	0.067	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.57	0.45	0.37	0.29	0.25	0.23
												R (hrs)	0.71	0.56	0.44	0.34	0.29	0.27
N21A8	0.01	0.28	25.5	25.5	Urban	0.131	5.00 *	0.35	2.65	1.90		Tc (hrs)	1.00	1.00	1.00	1.00	1.00	1.00
												R (hrs)	1.93	1.93	1.93	1.93	1.93	1.93

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N21A9	0.03	0.25	23.1	23.1	Urban	0.064	0.25	0.35	2.65	1.40	30	Tc (hrs)	0.79	0.63	0.51	0.41	0.36	0.33
												R (hrs)	0.77	0.60	0.48	0.38	0.32	0.29
N21A90	0.01	0.58	17.4	17.4	Urban	0.064	0.07	0.35	2.65	1.65	75	Tc (hrs)	0.98	0.82	0.74	0.65	0.60	0.56
												R (hrs)	2.89	2.38	2.11	1.84	1.68	1.55
N21A91	0.01	0.34	32.3	32.3	Urban	0.073	0.05	0.35	2.65	1.80	95	Tc (hrs)	0.51	0.43	0.40	0.36	0.33	0.31
												R (hrs)	1.53	1.27	1.15	1.03	0.95	0.88
N21A92	0.01	0.42	24.0	24.0	Urban	0.069	0.06	0.35	2.65	1.71	83	Tc (hrs)	0.69	0.58	0.52	0.46	0.43	0.40
												R (hrs)	2.26	1.85	1.65	1.44	1.34	1.24
N21AP1	0.02	0.34	2.7	2.7	Urban	0.063	0.14	0.35	2.65	1.28	57	Tc (hrs)	1.50	1.43	1.24	1.06	0.97	0.90
												R (hrs)	2.49	2.36	2.02	1.70	1.53	1.41
N21AP2	0.02	0.17	18.1	18.1	Urban	0.074	0.23	0.35	2.65	1.42	32	Tc (hrs)	0.73	0.58	0.48	0.38	0.34	0.30
												R (hrs)	0.69	0.54	0.43	0.34	0.30	0.26
N21AP3	0.01	0.23	21.2	21.2	Urban	0.069	0.16	0.35	2.65	1.31	52	Tc (hrs)	0.62	0.50	0.43	0.37	0.33	0.31
												R (hrs)	0.98	0.77	0.66	0.55	0.50	0.45
N21AP4	0.03	0.27	13.9	13.9	Urban	0.073	0.12	0.35	2.65	1.38	52	Tc (hrs)	0.85	0.70	0.60	0.51	0.47	0.43
												R (hrs)	0.81	0.65	0.55	0.46	0.42	0.38
N21AP5	0.01	0.18	57.4	57.4	Urban	0.091	0.14	0.35	2.65	1.46	42	Tc (hrs)	0.47	0.38	0.32	0.26	0.24	0.23
												R (hrs)	0.62	0.50	0.41	0.33	0.30	0.28
N21C	0.39	1.36	22.1	22.1	Urban	0.046	0.20	0.20	8.00	0.09	21	Tc (hrs)	1.50	1.11	0.95	0.81	0.74	0.69
												R (hrs)	1.26	0.90	0.76	0.64	0.58	0.54
N21D	0.05	0.35	22.9	22.9	Urban	0.030	0.10	0.25	9.70	0.04	10	Tc (hrs)	0.36	0.28	0.26	0.24	0.23	0.21
												R (hrs)	0.27	0.21	0.19	0.17	0.16	0.15
N21E	0.06	0.52	11.5	11.5	Urban	0.060	0.25	0.10	11.20	0.03	28	Tc (hrs)	1.04	0.80	0.71	0.63	0.59	0.55
												R (hrs)	1.11	0.82	0.73	0.64	0.59	0.55
N21F	0.10	0.67	14.9	14.9	Urban	0.055	0.30	0.10	11.20	0.03	15	Tc (hrs)	1.12	0.82	0.72	0.64	0.59	0.55
												R (hrs)	1.10	0.78	0.68	0.59	0.55	0.51

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N21G	0.06	0.51	27.5	27.5	Urban	0.060	0.30	0.11	11.20	0.03	14	Tc (hrs)	0.73	0.55	0.49	0.44	0.41	0.38
												R (hrs)	0.74	0.54	0.47	0.42	0.39	0.36
N21H	0.03	0.26	30.8	30.8	Urban	0.062	0.30	0.25	5.10	0.31	15	Tc (hrs)	0.67	0.43	0.35	0.30	0.28	0.25
												R (hrs)	0.56	0.34	0.28	0.23	0.21	0.19
N21I	0.28	0.83	19.3	19.3	Urban	0.048	0.25	0.30	5.10	0.26	4	Tc (hrs)	1.50	1.13	0.93	0.75	0.65	0.59
												R (hrs)	1.04	0.76	0.61	0.48	0.41	0.37
N21J	0.23	0.90	553.3	309.0	Urban	0.054	0.34	0.32	4.45	0.37	10	Tc (hrs)	0.69	0.37	0.30	0.25	0.23	0.22
												R (hrs)	0.52	0.26	0.20	0.17	0.16	0.14
N21K	0.23	0.75	629.3	315.0	Urban	0.054	0.33	0.32	4.25	0.42	6	Tc (hrs)	0.71	0.34	0.27	0.23	0.21	0.20
												R (hrs)	0.46	0.20	0.16	0.13	0.12	0.11
N21Z	0.11	0.52	33.0	33.0	Urban	0.043	0.18	0.35	6.40	0.14	6	Tc (hrs)	0.72	0.49	0.41	0.35	0.32	0.30
												R (hrs)	0.53	0.35	0.29	0.24	0.22	0.20
N22	0.47	1.28	20.3	20.3	Urban	0.068	0.32	0.09	10.10	0.05	16	Tc (hrs)	1.50	1.44	1.25	1.06	0.96	0.89
												R (hrs)	1.08	1.04	0.88	0.73	0.66	0.61
N22A	0.18	0.69	21.7	21.7	Urban	0.049	0.21	0.15	10.10	0.04	26	Tc (hrs)	0.85	0.65	0.58	0.51	0.48	0.45
												R (hrs)	0.61	0.45	0.40	0.35	0.32	0.30
N22B	0.19	0.53	34.0	34.0	Urban	0.053	0.30	0.17	7.00	0.12	5	Tc (hrs)	0.79	0.54	0.46	0.40	0.36	0.34
												R (hrs)	0.45	0.29	0.25	0.21	0.19	0.18
N23	0.39	0.97	12.4	12.4	Urban	0.047	0.20	0.29	4.25	0.43	10	Tc (hrs)	1.50	1.50	1.31	1.07	0.94	0.84
												R (hrs)	0.97	0.97	0.84	0.67	0.58	0.51
N23A	0.49	0.84	29.8	29.8	Urban	0.045	0.23	0.26	4.90	0.34	31	Tc (hrs)	1.03	0.75	0.65	0.55	0.49	0.45
												R (hrs)	0.50	0.35	0.30	0.25	0.22	0.20
N24	0.11	0.55	40.0	40.0	Natural	0.056	0.33	0.34	3.45	0.69	6	Tc (hrs)	1.50	0.92	0.67	0.52	0.45	0.40
												R (hrs)	1.28	0.74	0.52	0.40	0.34	0.30
N24A	0.24	1.10	34.5	34.5	Urban	0.043	0.18	0.27	4.80	0.35	33	Tc (hrs)	1.10	0.80	0.70	0.60	0.53	0.49
												R (hrs)	1.00	0.71	0.61	0.51	0.45	0.41

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N24B	0.07	0.42	33.3	33.3	Urban	0.061	0.30	0.27	4.80	0.30	7	Tc (hrs)	1.02	0.61	0.50	0.41	0.37	0.34
												R (hrs)	0.87	0.49	0.40	0.32	0.28	0.26
N24C	0.19	0.52	30.8	30.8	Urban	0.052	0.25	0.25	4.40	0.45	29	Tc (hrs)	0.86	0.60	0.51	0.43	0.39	0.36
												R (hrs)	0.49	0.32	0.27	0.23	0.20	0.19
N24D	0.09	0.44	27.3	27.3	Urban	0.045	0.24	0.30	4.25	0.50	29	Tc (hrs)	0.77	0.52	0.44	0.37	0.34	0.31
												R (hrs)	0.57	0.37	0.31	0.26	0.23	0.21
N24E	0.02	0.31	19.4	19.4	Natural	0.065	0.35	0.35	3.95	0.48		Tc (hrs)	0.08	0.90	0.67	0.52	0.44	0.39
												R (hrs)	0.08	1.16	0.84	0.63	0.53	0.46
N24F	0.11	0.49	32.7	32.7	Natural	0.055	0.35	0.36	5.00	0.28		Tc (hrs)	1.50	0.73	0.58	0.46	1.58	0.36
												R (hrs)	1.18	0.53	0.41	0.32	1.24	0.24
N24G	0.44	1.19	33.6	33.6	Natural	0.048	0.34	0.33	4.25	0.42	1	Tc (hrs)	0.08	1.43	1.10	0.87	0.75	0.66
												R (hrs)	0.04	1.01	0.76	0.58	0.50	0.43
N24H	0.29	1.26	339.7	275.0	Natural	0.049	0.35	0.35	4.15	0.44	35	Tc (hrs)	0.60	0.42	0.35	0.30	0.27	0.25
												R (hrs)	0.52	0.35	0.29	0.24	0.21	0.20
N24I	0.30	1.25	32.0	32.0	Natural	0.049	0.35	0.35	4.15	0.44		Tc (hrs)	1.50	1.50	1.24	0.97	1.55	0.73
												R (hrs)	1.38	1.38	1.12	0.85	1.43	0.62
N24J	0.12	0.89	31.5	31.5	Natural	0.054	0.35	0.35	3.95	0.48		Tc (hrs)	0.08	1.42	1.05	0.82	0.70	0.62
												R (hrs)	0.07	1.65	1.18	0.90	0.76	0.66
N24K	0.21	1.33	30.1	30.1	Natural	0.051	0.35	0.35	4.20	0.43		Tc (hrs)	1.50	1.50	1.38	1.54	0.93	0.82
												R (hrs)	1.77	1.77	1.61	1.82	1.04	0.90
N24L	0.38	0.84	500.0	303.0	Natural	0.047	0.35	0.35	4.90	0.29	12	Tc (hrs)	0.54	0.30	0.25	0.22	0.21	0.20
												R (hrs)	0.28	0.15	0.12	0.10	0.10	0.09
N24M	0.25	0.76	63.2	63.2	Natural	0.050	0.35	0.36	5.10	0.26	1	Tc (hrs)	1.44	0.68	0.54	0.43	0.38	0.35
												R (hrs)	0.99	0.43	0.33	0.26	0.22	0.20
N24N	0.13	0.83	106.0	106.0	Natural	0.054	0.35	0.35	4.15	0.44	6	Tc (hrs)	1.43	0.65	0.50	0.40	0.35	0.32
												R (hrs)	1.52	0.63	0.48	0.37	0.32	0.29

Sub Basin Data

Basin: [illegible] Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N24O	0.16	0.47	53.2	53.2	Natural	0.053	0.35	0.35	4.80	0.30	6	Tc (hrs)	1.00	0.52	0.42	0.33	0.30	0.28
												R (hrs)	0.59	0.28	0.22	0.17	0.15	0.14
N24P	0.12	0.50	82.0	82.0	Natural	0.054	0.35	0.37	5.20	0.25	5	Tc (hrs)	0.85	0.44	0.35	0.29	0.26	0.25
												R (hrs)	0.59	0.28	0.22	0.18	0.16	0.15
N24Q	0.04	0.39	007.7	315.0	Natural	0.061	0.35	0.38	6.40	0.16	4	Tc (hrs)	0.35	0.21	0.19	0.17	0.16	0.15
												R (hrs)	0.35	0.20	0.18	0.16	0.15	0.14
N24R	0.03	0.38	813.2	315.0	Natural	0.062	0.35	0.25	9.70	0.05	2	Tc (hrs)	0.24	0.19	0.18	0.16	0.15	0.15
												R (hrs)	0.24	0.19	0.17	0.16	0.15	0.14
N24S	0.05	0.36	211.1	315.0	Natural	0.060	0.35	0.30	8.00	0.08	3	Tc (hrs)	0.24	0.19	0.17	0.15	0.15	0.14
												R (hrs)	0.19	0.14	0.13	0.12	0.11	0.11
N24T	0.02	0.24	750.0	315.0	Natural	0.066	0.35	0.33	7.30	0.11		Tc (hrs)	0.22	0.16	0.15	0.13	0.13	0.12
												R (hrs)	0.23	0.16	0.15	0.13	0.12	0.12
N24U	0.11	0.49	057.1	315.0	Natural	0.054	0.35	0.39	6.20	0.17	7	Tc (hrs)	0.37	0.22	0.20	0.18	0.17	0.16
												R (hrs)	0.24	0.14	0.12	0.11	0.10	0.09
N24V	0.05	0.40	577.5	312.0	Natural	0.060	0.35	0.35	4.10	0.46	12	Tc (hrs)	0.46	0.24	0.20	0.18	0.16	0.15
												R (hrs)	0.43	0.21	0.17	0.15	0.14	0.13
N25	0.24	1.08	31.5	31.5	Natural	0.051	0.35	0.35	3.53	0.64		Tc (hrs)	1.50	1.50	1.52	0.97	0.83	0.73
												R (hrs)	1.38	1.38	1.40	0.85	0.72	0.62
N25A	0.10	0.75	42.7	42.7	Natural	0.057	0.35	0.35	4.70	0.31		Tc (hrs)	1.50	0.95	0.75	0.59	0.51	0.45
												R (hrs)	1.76	1.06	0.81	0.63	0.53	0.47
N25B	0.11	0.78	39.7	39.7	Urban	0.057	0.31	0.31	4.70	0.31	3	Tc (hrs)	1.50	0.93	0.75	0.60	0.53	0.47
												R (hrs)	1.65	0.96	0.77	0.60	0.51	0.46
N25C	0.17	0.70	38.6	38.6	Urban	0.057	0.33	0.31	4.80	0.30	2	Tc (hrs)	1.50	0.88	0.71	0.57	0.49	0.44
												R (hrs)	1.21	0.66	0.52	0.41	0.35	0.31
N25D	0.20	0.68	73.5	73.5	Urban	0.054	0.30	0.29	4.65	0.33	7	Tc (hrs)	1.00	0.57	0.47	0.38	0.34	0.31
												R (hrs)	0.67	0.36	0.29	0.23	0.20	0.19

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrography: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N25E	0.27	1.30	46.9	46.9	Urban	0.053	0.29	0.31	3.88	0.51	8	Tc (hrs)	1.50	1.28	1.02	0.83	0.73	0.65
												R (hrs)	1.50	1.26	0.98	0.78	0.67	0.59
N25F	0.09	0.41	48.8	48.8	Natural	0.060	0.34	0.33	4.60	0.34	1	Tc (hrs)	1.28	0.56	0.45	0.35	0.31	0.29
												R (hrs)	0.96	0.39	0.30	0.23	0.20	0.18
N25G	0.06	0.46	47.8	47.8	Natural	0.062	0.33	0.31	4.65	0.32	2	Tc (hrs)	1.23	0.61	0.49	0.39	0.35	0.32
												R (hrs)	1.23	0.56	0.45	0.35	0.30	0.27
N25H	0.07	0.71	45.1	45.1	Natural	0.058	0.35	0.35	4.35	0.40		Tc (hrs)	1.50	0.98	0.75	0.58	0.50	0.45
												R (hrs)	2.04	1.27	0.94	0.72	0.61	0.53
N25I	0.12	0.55	50.9	50.9	Urban	0.058	0.34	0.32	4.10	0.46	1	Tc (hrs)	1.50	0.75	0.57	0.45	0.39	0.35
												R (hrs)	1.22	0.56	0.42	0.32	0.27	0.24
N25J	0.10	0.50	60.0	60.0	Natural	0.055	0.35	0.35	3.92	0.49		Tc (hrs)	1.50	0.66	0.49	0.38	0.33	0.29
												R (hrs)	1.24	0.50	0.36	0.27	0.23	0.20
N25K	0.09	0.59	150.8	150.8	Natural	0.052	0.28	0.34	4.60	0.32	6	Tc (hrs)	0.65	0.35	0.29	0.25	0.23	0.22
												R (hrs)	0.59	0.30	0.24	0.20	0.19	0.18
N25L	0.06	0.42	47.6	47.6	Natural	0.047	0.23	0.35	4.50	0.35	5	Tc (hrs)	0.82	0.44	0.36	0.30	0.27	0.25
												R (hrs)	0.75	0.38	0.30	0.24	0.21	0.20
N25M	0.24	0.86	90.7	90.7	Urban	0.052	0.26	0.26	4.40	0.44	45	Tc (hrs)	0.66	0.49	0.43	0.37	0.34	0.32
												R (hrs)	0.47	0.34	0.29	0.25	0.22	0.21
N25N	0.03	0.32	43.8	43.8	Urban	0.064	0.25	0.25	4.30	0.48	30	Tc (hrs)	0.61	0.42	0.36	0.30	0.28	0.26
												R (hrs)	0.71	0.47	0.39	0.33	0.30	0.27
N25O	0.13	0.73	83.6	83.6	Urban	0.052	0.23	0.30	4.00	0.48	22	Tc (hrs)	0.80	0.52	0.44	0.36	0.33	0.30
												R (hrs)	0.72	0.44	0.37	0.30	0.27	0.24
N25P	0.17	0.72	105.6	315.0	Natural	0.052	0.35	0.35	3.95	0.48	58	Tc (hrs)	0.33	0.25	0.23	0.21	0.20	0.18
												R (hrs)	0.23	0.17	0.15	0.14	0.13	0.12
N25Q	0.03	0.32	175.0	315.0	Natural	0.064	0.34	0.34	3.95	0.49	67	Tc (hrs)	0.22	0.18	0.17	0.15	0.14	0.14
												R (hrs)	0.21	0.17	0.15	0.14	0.13	0.12

Sub Basin Data

Basin: [illegible] Storms: Multiple Duration: 6 Hours Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N25R	0.09	0.48	468.8	315.0	Natural	0.057	0.34	0.34	3.95	0.49	67	Tc (hrs)	0.25	0.21	0.19	0.18	0.17	0.16
												R (hrs)	0.17	0.14	0.13	0.12	0.11	0.10
N25S	0.03	0.34	632.4	315.0	Natural	0.065	0.34	0.34	3.95	0.49	67	Tc (hrs)	0.23	0.19	0.17	0.16	0.15	0.14
												R (hrs)	0.24	0.19	0.17	0.16	0.15	0.14
N26	0.04	0.33	54.5	54.5	Natural	0.061	0.35	0.35	3.88	0.50		Tc (hrs)	1.50	0.54	0.40	0.31	0.27	0.25
												R (hrs)	1.50	0.48	0.35	0.26	0.22	0.21
N26A	0.35	1.29	49.6	49.6	Natural	0.049	0.25	0.31	4.00	0.48	9	Tc (hrs)	1.50	1.11	0.90	0.74	0.65	0.58
												R (hrs)	1.29	0.92	0.73	0.59	0.51	0.44
N26B	0.23	1.29	53.5	53.5	Natural	0.040	0.16	0.31	4.00	0.45	17	Tc (hrs)	1.24	0.80	0.68	0.56	0.50	0.45
												R (hrs)	1.35	0.83	0.69	0.56	0.49	0.44
N27	0.28	1.80	106.7	106.7	Natural	0.050	0.33	0.34	3.33	0.76	8	Tc (hrs)	1.50	1.33	0.97	0.75	0.65	0.58
												R (hrs)	1.91	1.67	1.18	0.89	0.76	0.66
N27A	0.11	0.77	46.8	46.8	Natural	0.053	0.33	0.35	4.55	0.35		Tc (hrs)	1.50	0.89	0.70	0.55	0.48	0.43
												R (hrs)	1.62	0.91	0.69	0.53	0.45	0.40
N27B	0.08	0.65	52.3	52.3	Natural	0.057	0.35	0.35	3.95	0.48		Tc (hrs)	0.08	0.89	0.66	0.51	0.44	0.39
												R (hrs)	0.07	0.97	0.69	0.52	0.44	0.38
N27C	0.09	0.48	50.0	50.0	Natural	0.056	0.35	0.35	3.92	0.49		Tc (hrs)	1.50	0.71	0.52	0.41	0.35	0.31
												R (hrs)	1.31	0.57	0.40	0.31	0.26	0.23
N27D	0.09	0.65	49.2	49.2	Urban	0.050	0.20	0.28	3.95	0.51	23	Tc (hrs)	0.88	0.58	0.49	0.41	0.37	0.34
												R (hrs)	0.90	0.57	0.47	0.39	0.35	0.32
N27E	0.19	0.73	42.5	42.5	Natural	0.051	0.35	0.35	3.88	0.51	2	Tc (hrs)	1.50	0.98	0.73	0.57	0.49	0.43
												R (hrs)	1.17	0.73	0.53	0.40	0.34	0.30
N27F	0.28	1.07	512.1	304.0	Natural	0.049	0.35	0.35	3.95	0.48	16	Tc (hrs)	0.73	0.41	0.33	0.27	0.25	0.23
												R (hrs)	0.56	0.30	0.23	0.19	0.17	0.16
N27G	0.26	1.39	407.9	297.0	Natural	0.049	0.35	0.35	4.00	0.47	12	Tc (hrs)	0.98	0.52	0.42	0.34	0.29	0.27
												R (hrs)	1.01	0.50	0.39	0.31	0.26	0.24

Sub Basin Data

Basin: 03 Storms: Multiple Duration: 6 Hour Loss Method: Green Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
N27H	0.21	1.01	276.2	255.0	Natural	0.051	0.35	0.35	4.00	0.47	10	Tc (hrs)	0.92	0.46	0.36	0.29	0.26	0.24
												R (hrs)	0.83	0.39	0.29	0.23	0.20	0.19
N27I	0.17	0.72	220.8	218.0	Natural	0.052	0.35	0.35	4.60	0.34	9	Tc (hrs)	0.69	0.36	0.29	0.24	0.23	0.21
												R (hrs)	0.53	0.26	0.20	0.16	0.15	0.14
N27J	0.19	0.71	366.2	282.0	Natural	0.052	0.35	0.37	5.30	0.24	3	Tc (hrs)	0.62	0.30	0.25	0.22	0.20	0.20
												R (hrs)	0.43	0.20	0.16	0.14	0.13	0.12
N27K	0.63	1.29	15.5	15.5	Urban	0.044	0.35	0.38	5.40	0.23	5	Tc (hrs)	1.50	1.50	1.50	1.19	1.01	0.90
												R (hrs)	0.93	0.93	0.93	0.72	0.60	0.52
N27L	0.47	1.33	54.9	54.9	Natural	0.045	0.34	0.34	4.60	0.34	11	Tc (hrs)	1.50	0.98	0.80	0.65	0.57	0.51
												R (hrs)	1.13	0.70	0.56	0.45	0.39	0.34
S01	0.26	1.35	20.0	20.0	Urban	0.052	0.24	0.25	4.80	0.37	36	Tc (hrs)	1.50	1.39	1.21	1.03	0.92	0.84
												R (hrs)	1.60	1.48	1.26	1.05	0.93	0.85
S01A	0.35	1.22	16.4	16.4	Urban	0.047	0.23	0.25	4.70	0.41	27	Tc (hrs)	1.50	1.40	1.20	1.01	0.90	0.82
												R (hrs)	1.24	1.15	0.97	0.80	0.71	0.63
S01B	0.31	0.90	18.9	18.9	Urban	0.051	0.24	0.25	5.10	0.31	40	Tc (hrs)	1.34	0.99	0.87	0.75	0.68	0.62
												R (hrs)	0.92	0.66	0.57	0.48	0.43	0.39
S01C	0.40	1.06	15.1	15.1	Urban	0.048	0.22	0.26	5.70	0.25	35	Tc (hrs)	1.50	1.21	1.05	0.89	0.80	0.74
												R (hrs)	1.03	0.81	0.69	0.58	0.51	0.47
S01D	0.63	1.70	15.3	15.3	Urban	0.043	0.23	0.25	5.40	0.29	33	Tc (hrs)	1.50	1.50	1.44	1.20	1.08	0.98
												R (hrs)	1.16	1.16	1.10	0.91	0.80	0.72
S01E	0.23	0.79	16.5	16.5	Urban	0.046	0.23	0.25	5.40	0.30	27	Tc (hrs)	1.35	0.95	0.83	0.70	0.62	0.57
												R (hrs)	0.99	0.67	0.57	0.48	0.42	0.38
S01F	0.15	0.77	15.6	15.6	Urban	0.045	0.22	0.25	4.80	0.41	22	Tc (hrs)	1.50	1.01	0.86	0.73	0.64	0.58
												R (hrs)	1.38	0.89	0.75	0.62	0.54	0.48
S01G	0.28	0.92	16.3	16.3	Urban	0.044	0.20	0.15	7.00	0.16	40	Tc (hrs)	1.16	0.89	0.78	0.68	0.62	0.58
												R (hrs)	0.84	0.63	0.54	0.46	0.42	0.39

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green/Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
S01H	0.32	1.27	15.7	15.7	Urban	0.043	0.23	0.25	5.20	0.33	29	Tc (hrs)	1.50	1.33	1.14	0.97	0.86	0.78
												R (hrs)	1.34	1.17	0.99	0.82	0.72	0.65
S01I	0.23	0.91	19.8	19.8	Urban	0.046	0.22	0.25	4.80	0.38	41	Tc (hrs)	1.23	0.91	0.80	0.69	0.63	0.58
												R (hrs)	1.00	0.71	0.62	0.52	0.47	0.43
S10	0.11	0.76	18.4	18.4	Urban	0.057	0.22	0.17	6.80	0.16	39	Tc (hrs)	1.18	0.90	0.79	0.68	0.63	0.58
												R (hrs)	1.25	0.93	0.79	0.67	0.61	0.57
S10A	0.05	0.69	20.3	20.3	Urban	0.061	0.24	0.22	6.40	0.18	30	Tc (hrs)	1.22	0.91	0.78	0.66	0.60	0.55
												R (hrs)	1.99	1.43	1.21	1.01	0.90	0.83
S10B	0.14	0.69	14.5	14.5	Urban	0.057	0.25	0.15	7.30	0.13	37	Tc (hrs)	1.23	1.55	0.81	0.70	0.64	0.60
												R (hrs)	1.08	1.40	0.68	0.58	0.53	0.49
S10C	0.37	1.72	10.5	10.5	Urban	0.043	0.12	0.17	6.80	0.18	67	Tc (hrs)	1.50	1.50	1.40	1.23	1.12	1.04
												R (hrs)	1.57	1.57	1.45	1.25	1.14	1.05
S10D	0.46	1.27	15.7	15.7	Urban	0.049	0.22	0.22	5.20	0.29	46	Tc (hrs)	1.50	1.30	1.14	0.98	0.89	0.82
												R (hrs)	1.10	0.94	0.81	0.68	0.62	0.56
S10E	0.63	2.48	13.3	13.3	Urban	0.043	0.22	0.21	6.20	0.21	33	Tc (hrs)	1.50	1.50	1.50	1.50	1.48	1.36
												R (hrs)	1.56	1.56	1.56	1.56	1.54	1.40
S10F	0.33	1.23	16.3	16.3	Urban	0.051	0.25	0.25	5.70	0.25	33	Tc (hrs)	1.50	1.39	1.20	1.01	0.91	0.83
												R (hrs)	1.28	1.18	1.00	0.83	0.74	0.67
S10G	0.28	0.69	23.2	23.2	Urban	0.050	0.24	0.21	6.40	0.19	32	Tc (hrs)	0.97	0.73	0.63	0.54	0.49	0.45
												R (hrs)	0.54	0.40	0.34	0.28	0.25	0.24
S10I	0.13	0.70	22.9	22.9	Urban	0.048	0.22	0.25	5.30	0.31	34	Tc (hrs)	1.01	0.75	0.65	0.55	0.50	0.46
												R (hrs)	0.90	0.64	0.55	0.46	0.41	0.37
S10J	0.08	0.45	26.7	26.7	Urban	0.051	0.24	0.23	6.20	0.22	29	Tc (hrs)	0.71	0.52	0.45	0.39	0.35	0.33
												R (hrs)	0.58	0.41	0.35	0.29	0.27	0.25
S10K	0.34	1.14	21.9	21.9	Urban	0.047	0.23	0.21	6.40	0.19	46	Tc (hrs)	1.26	0.97	0.85	0.74	0.68	0.63
												R (hrs)	0.99	0.74	0.64	0.54	0.49	0.45

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hours Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
S10M	0.35	0.95	28.4	28.4	Urban	0.046	0.24	0.15	8.00	0.10	41	Tc (hrs)	0.93	0.71	0.63	0.55	0.51	0.48
												R (hrs)	0.59	0.44	0.38	0.33	0.30	0.28
S10N	0.14	0.67	19.4	19.4	Urban	0.053	0.25	0.25	5.00	0.32	40	Tc (hrs)	1.10	0.82	0.72	0.62	0.55	0.51
												R (hrs)	0.93	0.67	0.58	0.49	0.44	0.40
S10O	0.79	1.29	17.1	17.1	Urban	0.041	0.23	0.25	5.80	0.24	34	Tc (hrs)	1.50	1.24	1.06	0.89	0.80	0.73
												R (hrs)	0.81	0.66	0.55	0.45	0.40	0.37
S10P	0.33	1.18	23.7	23.7	Urban	0.046	0.21	0.25	5.00	0.35	42	Tc (hrs)	1.35	1.00	0.88	0.77	0.69	0.63
												R (hrs)	1.11	0.80	0.69	0.59	0.53	0.48
S10Q	0.26	1.01	16.8	16.8	Urban	0.047	0.20	0.19	6.60	0.18	53	Tc (hrs)	1.23	0.96	0.85	0.75	0.68	0.64
												R (hrs)	1.03	0.78	0.68	0.59	0.53	0.49
S10R	0.03	0.52	19.2	19.2	Urban	0.062	0.25	0.25	4.70	0.36	40	Tc (hrs)	1.04	0.78	0.68	0.58	0.53	0.48
												R (hrs)	1.60	1.16	1.00	0.84	0.75	0.68
S10S	0.49	0.88	15.9	15.9	Urban	0.046	0.21	0.15	8.00	0.10	50	Tc (hrs)	1.10	0.85	0.76	0.67	0.62	0.58
												R (hrs)	0.56	0.42	0.37	0.32	0.30	0.28
S10T	0.34	1.12	21.4	21.4	Urban	0.045	0.23	0.25	5.40	0.29	37	Tc (hrs)	1.38	1.01	0.89	0.76	0.68	0.63
												R (hrs)	1.07	0.76	0.66	0.55	0.49	0.45
S10U	0.11	0.69	17.4	17.4	Urban	0.046	0.23	0.25	4.90	0.39	22	Tc (hrs)	1.33	0.90	0.77	0.64	0.57	0.52
												R (hrs)	1.35	0.87	0.73	0.60	0.53	0.47
S10V	0.20	0.79	21.5	21.5	Urban	0.051	0.25	0.25	4.90	0.34	40	Tc (hrs)	1.16	0.86	0.75	0.65	0.58	0.54
												R (hrs)	0.91	0.65	0.57	0.48	0.43	0.39
S20	0.14	0.85	30.6	30.6	Urban	0.053	0.23	0.15	8.80	0.07	44	Tc (hrs)	0.89	0.69	0.61	0.54	0.50	0.47
												R (hrs)	0.88	0.67	0.59	0.51	0.47	0.44
S20A	0.16	0.87	20.7	20.7	Urban	0.052	0.23	0.15	8.80	0.07	44	Tc (hrs)	1.06	0.82	0.73	0.64	0.60	0.55
												R (hrs)	1.01	0.76	0.66	0.58	0.53	0.49
S30	0.32	1.12	26.8	26.8	Urban	0.045	0.22	0.26	4.55	0.43	27	Tc (hrs)	1.48	1.01	0.87	0.74	0.66	0.60
												R (hrs)	1.19	0.78	0.66	0.55	0.49	0.44

Sub Basin Data

Basin: [illegible] Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

Area ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
S30A	0.53	1.34	14.2	14.2	Urban	0.042	0.22	0.21	6.40	0.21	28	Tc (hrs)	1.50	1.37	1.18	0.98	0.88	0.81
												R (hrs)	1.05	0.95	0.80	0.66	0.58	0.53
S30B	0.40	1.63	20.9	20.9	Urban	0.045	0.22	0.25	5.80	0.25	29	Tc (hrs)	1.50	1.42	1.23	1.03	0.92	0.84
												R (hrs)	1.45	1.37	1.16	0.95	0.84	0.76
S30C	0.46	1.49	24.2	24.2	Urban	0.049	0.23	0.15	7.30	0.13	41	Tc (hrs)	1.50	1.14	0.99	0.86	0.79	0.74
												R (hrs)	1.25	0.92	0.79	0.67	0.61	0.57
S30D	0.13	0.46	15.2	15.2	Urban	0.057	0.25	0.17	6.80	0.15	34	Tc (hrs)	0.92	0.69	0.60	0.52	0.48	0.45
												R (hrs)	0.58	0.42	0.36	0.31	0.28	0.26

SOIL INFORMATION

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
398A	Maricopa	C_EBD	0.001	1.1	0.10		
	Maricopa	C_GGA	0.005	4.6	0.25		
	Maricopa	C_RS	0.097	94.3	0.40	65.0	100
398B	Maricopa	C_ABA	0.007	5.5	0.38		
	Maricopa	C_AE	0.000	0.3	0.39		
	Maricopa	C_ES	0.011	8.3	0.25		
	Maricopa	C_GE	0.028	20.6	0.26		
	Maricopa	C_GGA	0.081	59.6	0.25		
	Maricopa	C_RS	0.008	5.8	0.40	65.0	100
398C	Maricopa	C_ES	0.032	34.3	0.25		
	Maricopa	C_GGA	0.034	36.3	0.25		
	Maricopa	C_MR	0.020	21.6	0.05		
	Maricopa	C_VF	0.007	7.8	0.01		
398D	Maricopa	C_RS	0.081	100.0	0.40	65.0	100
398E	Maricopa	C_GE	0.005	4.2	0.26		
	Maricopa	C_GGA	0.003	2.9	0.25		
	Maricopa	C_LCA	0.009	8.0	0.25		
	Maricopa	C_MR	0.001	0.6	0.05		
	Maricopa	C_RS	0.084	74.7	0.40	65.0	100
	Maricopa	C_TU	0.003	2.9	0.25		
	Maricopa	C_VF	0.008	6.7	0.01		
398F	Maricopa	C_CP	0.046	22.4	0.40		
	Maricopa	C_CRB	0.009	4.3	0.40		
	Maricopa	C_GE	0.017	8.2	0.26		
	Maricopa	C_GGA	0.007	3.3	0.25		
	Maricopa	C_MR	0.000		0.05		
	Maricopa	C_RS	0.059	28.7	0.40	65.0	100
	Maricopa	C_TD	0.046	22.5	1.20		
	Maricopa	C_VF	0.021	10.5	0.01		
398G	Maricopa	C_CP	0.004	2.0	0.40		
	Maricopa	C_CRB	0.013	6.0	0.40		
	Maricopa	C_ES	0.011	4.9	0.25		
	Maricopa	C_GE	0.005	2.1	0.26		
	Maricopa	C_GGA	0.005	2.5	0.25		
	Maricopa	C_MP	0.012	5.5	0.25		
	Maricopa	C_MR	0.009	4.2	0.05		
	Maricopa	C_RBA	0.005	2.5	0.26		
	Maricopa	C_TD	0.112	50.8	1.20		
	Maricopa	C_TE	0.001	0.6	0.25		
	Maricopa	C_TU	0.035	15.8	0.25		
	Maricopa	C_TW	0.005	2.2	0.05		
	Maricopa	C_VF	0.002	1.0	0.01		
A01	Central County	BR	0.061	30.3	1.05		
	Central County	CB	0.101	50.0	0.40		
	Central County	TD	0.040	19.7	1.20		
A01A	Central County	BR	0.003	5.7	1.05		
	Central County	CB	0.028	55.6	0.40		
	Central County	TD	0.020	38.7	1.20		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A01B	Central County	BR	0.070	46.7	1.05		
	Central County	CB	0.047	31.5	0.40		
	Central County	TD	0.033	21.8	1.20		
A01C	Central County	AA	0.002	1.1	0.26		
	Central County	BR	0.080	36.2	1.05		
	Central County	CB	0.014	6.1	0.40		
	Central County	GE	0.028	12.8	0.26		
	Central County	GGA	0.001	0.2	0.25		
	Central County	MA	0.093	42.0	0.40		
	Central County	VH	0.004	1.6	0.27		
A01D	Central County	AA	0.001	0.7	0.26		
	Central County	ABB	0.003	1.3	0.39		
	Central County	CA2	0.061	29.2	0.38		
	Central County	CB	0.006	2.7	0.40		
	Central County	CO	0.084	39.8	0.29	20.0	100
	Central County	GGA	0.015	7.2	0.25		
	Central County	MA	0.040	19.1	0.40		
	Central County	PEA	0.000		0.37		
A01E	Central County	CO	0.063	75.7	0.29	20.0	100
	Central County	MA	0.020	24.3	0.40		
A01F	Central County	CA2	0.103	36.5	0.38		
	Central County	CO	0.098	34.8	0.29	20.0	100
	Central County	GGA	0.000		0.25		
	Central County	LCA	0.008	2.9	0.25		
	Central County	MA	0.008	2.8	0.40		
	Central County	PEA	0.065	23.0	0.37		
A01G	Central County	AA	0.020	11.0	0.26		
	Central County	BR	0.015	8.3	1.05		
	Central County	CA2	0.009	4.8	0.38		
	Central County	CB	0.003	1.4	0.40		
	Central County	GGA	0.023	12.5	0.25		
	Central County	MA	0.114	61.4	0.40		
	Central County	VH	0.001	0.5	0.27		
A01H	Central County	BR	0.044	63.3	1.05		
	Central County	CB	0.002	2.3	0.40		
	Central County	MA	0.019	27.6	0.40		
	Central County	TD	0.005	6.8	1.20		
A02	Central County	BR	0.017	98.8	1.05		
	Central County	MA	0.000	1.2	0.40		
A02A	Central County	AA	0.030	5.0	0.26		
	Central County	BR	0.025	4.2	1.05		
	Central County	CA2	0.133	22.0	0.38		
	Central County	CO	0.030	4.9	0.29	20.0	100
	Central County	GE	0.072	11.8	0.26		
	Central County	GGA	0.030	4.9	0.25		
	Central County	MA	0.148	24.5	0.40		
	Central County	PEA	0.067	11.0	0.37		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A02A	Central County	VG	0.067	11.1	0.91		
	Central County	VH	0.004	0.7	0.27		
A02B	Central County	CA2	0.191	70.4	0.38		
	Central County	GGA	0.000		0.25		
	Central County	LCA	0.000	0.1	0.25		
	Central County	PEA	0.080	29.4	0.37		
A02C	Central County	LB	0.009	2.7	0.40		
	Central County	LCA	0.232	69.7	0.25		
	Central County	PEA	0.092	27.6	0.37		
A02D	Central County	BR	0.023	36.1	1.05		
	Central County	MA	0.002	3.2	0.40		
	Central County	VG	0.038	60.7	0.91		
A03	Central County	BR	0.054	19.4	1.05		
	Central County	CB	0.144	52.0	0.40		
	Central County	GP	0.008	3.0	*		
	Central County	TD	0.003	1.2	1.20		
	Central County	VG	0.068	24.5	0.91		
A03A	Central County	BR	0.001	0.4	1.05		
	Central County	CA2	0.076	53.6	0.38		
	Central County	PEA	0.031	22.3	0.37		
	Central County	VG	0.033	23.7	0.91		
A03B	Central County	BR	0.009	12.5	1.05		
	Central County	CA2	0.017	23.5	0.38		
	Central County	PEA	0.019	26.6	0.37		
	Central County	VG	0.027	37.4	0.91		
A03C	Central County	CA2	0.084	25.8	0.38		
	Central County	LCA	0.059	18.1	0.25		
	Central County	PEA	0.183	56.0	0.37		
A03D	Central County	BR	0.030	23.8	1.05		
	Central County	CB	0.035	27.2	0.40		
	Central County	VG	0.063	49.1	0.91		
A03E	Central County	CA2	0.050	32.4	0.38		
	Central County	LCA	0.006	3.7	0.25		
	Central County	PEA	0.077	49.9	0.37		
	Central County	VG	0.021	14.0	0.91		
A04	Central County	BR	0.011	13.7	1.05		
	Central County	CA2	0.003	3.8	0.38		
	Central County	CB	0.029	36.7	0.40		
	Central County	VG	0.036	45.8	0.91		
A04A	Central County	CA2	0.046	20.8	0.38		
	Central County	LCA	0.045	20.2	0.25		
	Central County	PEA	0.116	52.2	0.37		
	Central County	VF	0.014	6.2	0.01		
	Central County	VG	0.001	0.6	0.91		
A05	Central County	ABA	0.001	0.5	0.38		
	Central County	CA2	0.049	37.5	0.38		

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* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
	Central County	CB	0.016	12.4	0.40		
	Central County	GP	0.015	11.5	*		
	Central County	PEA	0.046	34.8	0.37		
	Central County	TW	0.004	3.3	0.05		
A05A	Central County	LCA	0.002	1.3	0.25		
	Central County	LE	0.008	5.8	0.04		
	Central County	PEA	0.002	1.2	0.37		
	Central County	TW	0.132	91.7	0.05		
A06	Central County	BR	0.001	0.2	1.05		
	Central County	CB	0.117	42.0	0.40		
	Central County	GGA	0.037	13.2	0.25		
	Central County	MA	0.032	11.5	0.40		
	Central County	TD	0.031	11.2	1.20		
	Central County	VG	0.061	22.0	0.91		
A06A	Central County	ABA	0.005	1.9	0.38		
	Central County	CA2	0.032	11.6	0.38		
	Central County	GGA	0.058	20.7	0.25		
	Central County	GXA	0.005	1.7	0.23		
	Central County	LCA	0.043	15.4	0.25		
	Central County	MR	0.021	7.6	0.05		
	Central County	PEA	0.019	6.8	0.37		
	Central County	RBA	0.033	11.8	0.26		
	Central County	TE	0.006	2.2	0.25		
	Central County	TFB	0.026	9.3	0.36		
	Central County	VA	0.031	11.0	0.39		
A07	Central County	CB	0.050	42.1	0.40		
	Central County	MA	0.001	0.9	0.40		
	Central County	TD	0.022	18.7	1.20		
	Central County	VG	0.045	38.3	0.91		
A07A	Central County	ABA	0.001	1.0	0.38		
	Central County	CB	0.002	1.5	0.40		
	Central County	GGA	0.007	5.4	0.25		
	Central County	MA	0.040	32.1	0.40		
	Central County	VG	0.028	22.3	0.91		
	Central County	VH	0.047	37.6	0.27		
A07B	Central County	ABA	0.103	15.8	0.38		
	Central County	CA2	0.157	24.1	0.38		
	Central County	GE	0.004	0.6	0.26		
	Central County	GGA	0.027	4.2	0.25		
	Central County	GXA	0.100	15.4	0.23		
	Central County	LCA	0.066	10.2	0.25		
	Central County	LCB	0.007	1.1	0.25		
	Central County	MA	0.000		0.40		
	Central County	MO	0.004	0.6	0.39		
	Central County	MP	0.007	1.0	0.25		
	Central County	MR	0.008	1.2	0.05		
	Central County	RBA	0.004	0.6	0.26		
	Central County	TE	0.031	4.8	0.25		
	Central County	TFA	0.003	0.5	0.37		

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* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A07B	Central County	TFB	0.033	5.1	0.36		
	Central County	TRB	0.067	10.4	0.13		
	Central County	VA	0.020	3.1	0.39		
	Central County	VH	0.008	1.2	0.27		
A07C	Central County	CA2	0.023	13.4	0.38		
	Central County	LCB	0.015	8.4	0.25		
	Central County	MP	0.021	11.8	0.25		
	Central County	MR	0.011	6.3	0.05		
	Central County	TE	0.060	34.3	0.25		
	Central County	TFA	0.028	15.8	0.37		
	Central County	TG	0.007	3.8	0.04		
	Central County	TH	0.001	0.8	0.04		
	Central County	VA	0.009	5.4	0.39		
A07D	Central County	CA2	0.001	0.3	0.38		
	Central County	CB	0.029	12.8	0.40		
	Central County	GE	0.008	3.6	0.26		
	Central County	MO	0.004	1.7	0.39		
	Central County	TFA	0.053	23.1	0.37		
	Central County	VA	0.134	58.4	0.39		
A07E	Central County	GXA	0.006	2.5	0.23		
	Central County	LCA	0.000		0.25		
	Central County	MR	0.159	70.0	0.05		
	Central County	RBA	0.008	3.7	0.26		
	Central County	RPE	0.013	5.9	0.29		
	Central County	TE	0.006	2.6	0.25		
	Central County	TFA	0.032	13.9	0.37		
	Central County	TH	0.003	1.4	0.04		
A07F	Central County	LB	0.004	1.8	0.40		
	Central County	LCA	0.103	44.2	0.25		
	Central County	MP	0.012	5.0	0.25		
	Central County	MR	0.008	3.4	0.05		
	Central County	PEA	0.005	2.0	0.37		
	Central County	RBA	0.030	13.0	0.26		
	Central County	RPE	0.001	0.3	0.29		
	Central County	TE	0.071	30.3	0.25		
A07G	Central County	MR	0.160	62.0	0.05		
	Central County	RBA	0.030	11.7	0.26		
	Central County	RPE	0.031	12.1	0.29		
	Central County	TE	0.004	1.4	0.25		
	Central County	TFA	0.001	0.2	0.37		
	Central County	TG	0.033	12.6	0.04		
	Central County	TPB	0.000	0.1	0.12		
A07H	Central County	CA2	0.020	21.4	0.38		
	Central County	TE	0.029	30.7	0.25		
	Central County	TFA	0.027	28.6	0.37		
	Central County	TG	0.011	11.8	0.04		
	Central County	VA	0.007	7.5	0.39		
A08	Central County	CB	0.029	36.9	0.40		
	Central County	TD	0.016	20.7	1.20		

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Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A08	Central County	VG	0.030	38.3	0.91		
	Central County	VH	0.003	4.0	0.27		
A08A	Central County	BR	0.027	19.9	1.05		
	Central County	CB	0.005	3.8	0.40		
	Central County	GE	0.017	12.6	0.26		
	Central County	TD	0.011	7.7	1.20		
	Central County	VA	0.000	0.1	0.39		
	Central County	VG	0.049	35.4	0.91		
	Central County	VH	0.028	20.6	0.27		
A08B	Central County	BR	0.011	10.7	1.05		
	Central County	CB	0.073	73.8	0.40		
	Central County	GE	0.002	1.9	0.26		
	Central County	GGA	0.005	4.8	0.25		
	Central County	TD	0.004	4.0	1.20		
	Central County	TFA	0.002	2.3	0.37		
	Central County	VG	0.002	2.4	0.91		
A09	Central County	BR	0.014	8.1	1.05		
	Central County	CB	0.137	77.7	0.40		
	Central County	TD	0.025	14.2	1.20		
A09A	Central County	ABA	0.017	20.5	0.38		
	Central County	BR	0.018	21.3	1.05		
	Central County	CB	0.015	18.4	0.40		
	Central County	GGA	0.006	7.2	0.25		
	Central County	TFA	0.011	13.3	0.37		
	Central County	VA	0.016	19.3	0.39		
A09B	Central County	ABA	0.032	77.5	0.38		
	Central County	CA2	0.005	11.4	0.38		
	Central County	TE	0.000	0.5	0.25		
	Central County	TFA	0.004	10.4	0.37		
	Central County	VA	0.000	0.2	0.39		
A09C	Central County	CA2	0.013	18.1	0.38		
	Central County	TE	0.035	47.3	0.25		
	Central County	TFA	0.023	32.0	0.37		
	Central County	TG	0.001	0.8	0.04		
	Central County	VA	0.001	1.8	0.39		
A09D	Central County	MR	0.025	9.7	0.05		
	Central County	PRB	0.015	6.0	0.28		
	Central County	RBA	0.005	2.1	0.26		
	Central County	RPE	0.004	1.7	0.29		
	Central County	TE	0.004	1.7	0.25		
	Central County	TFA	0.002	0.8	0.37		
	Central County	TG	0.008	3.0	0.04		
	Central County	TPB	0.190	75.0	0.12		
A09E	Central County	LCA	0.015	9.9	0.25		
	Central County	MP	0.003	2.3	0.25		
	Central County	PRB	0.109	74.4	0.28		
	Central County	RBA	0.000	0.1	0.26		
	Central County	TE	0.011	7.3	0.25		

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Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A09E	Central County	TPB	0.009	6.0	0.12		
A09F	Central County	BE	0.110	30.1	0.24		
	Central County	LCA	0.008	2.2	0.25		
	Central County	MP	0.034	9.3	0.25		
	Central County	MR	0.038	10.3	0.05		
	Central County	MTB	0.024	6.4	0.15		
	Central County	PRB	0.053	14.6	0.28		
	Central County	PT	0.003	0.8	0.40		
	Central County	PWB	0.043	11.8	0.38		
	Central County	TRA	0.017	4.5	0.11		
	Central County	TRB	0.001	0.1	0.13		
	Central County	TSC	0.036	9.8	0.14		
A09G	Central County	BE	0.042	19.0	0.24		
	Central County	PT	0.008	3.8	0.40		
	Central County	PWB	0.163	73.6	0.38		
	Central County	VE	0.008	3.6	0.25		
A09H	Central County	BE	0.098	40.1	0.24		
	Central County	GYD	0.004	1.5	0.26		
	Central County	PRB	0.064	26.1	0.28		
	Central County	PWB	0.079	32.3	0.38		
A09I	Central County	GYD	0.013	7.8	0.26		
	Central County	MTB	0.011	6.3	0.15		
	Central County	PRB	0.010	5.9	0.28		
	Central County	PWB	0.001	0.3	0.38		
	Central County	TPB	0.133	79.6	0.12		
A09J	Central County	BE	0.058	34.4	0.24		
	Central County	PWB	0.110	65.6	0.38		
A09K	Central County	BE	0.150	36.4	0.24		
	Central County	PT	0.009	2.1	0.40		
	Central County	PWB	0.235	57.1	0.38		
	Central County	VE	0.018	4.4	0.25		
A09L	Central County	BE	0.002	1.2	0.24		
	Central County	GYD	0.034	25.2	0.26		
	Central County	MTB	0.049	35.8	0.15		
	Central County	PWB	0.047	34.5	0.38		
	Central County	TPB	0.005	3.4	0.12		
A09M	Central County	BE	0.080	32.3	0.24		
	Central County	GYD	0.021	8.6	0.26		
	Central County	PWB	0.139	56.3	0.38		
	Central County	TPB	0.007	2.8	0.12		
A09N	Central County	GYD	0.025	22.7	0.26		
	Central County	MTB	0.001	0.5	0.15		
	Central County	PWB	0.010	8.8	0.38		
	Central County	TPB	0.075	67.9	0.12		
A09O	Central County	BE	0.076	39.1	0.24		
	Central County	CV	0.007	3.8	0.39		
	Central County	PWB	0.111	57.1	0.38		

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Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A09P	Central County	BE	0.132	74.5	0.24		
	Central County	PWB	0.045	25.5	0.38		
A09Q	Central County	BE	0.007	3.3	0.24		
	Central County	GWD	0.037	17.0	0.35		
	Central County	PWB	0.174	79.7	0.38		
A09R	Central County	BE	0.021	14.8	0.24		
	Central County	CV	0.063	44.0	0.39		
	Central County	GN	0.005	3.3	0.25		
	Central County	GYD	0.001	0.4	0.26		
	Central County	PWB	0.054	37.5	0.38		
A09S	Central County	BE	0.063	92.0	0.24		
	Central County	PWB	0.006	8.0	0.38		
A09T	Central County	BE	0.010	5.4	0.24		
	Central County	CV	0.073	40.5	0.39		
	Central County	GN	0.001	0.3	0.25		
	Central County	GYD	0.053	29.4	0.26		
	Central County	PWB	0.044	24.4	0.38		
A09U	Central County	CO	0.001	0.6	0.29	20.0	100
	Central County	GN	0.014	7.8	0.25		
	Central County	GWD	0.000	0.1	0.35		
	Central County	GYD	0.012	6.6	0.26		
	Central County	PWB	0.097	55.6	0.38		
	Central County	RS	0.051	29.2	0.40	65.0	100
A10	Central County	CF	0.123	57.4	0.50		
	Central County	MTB	0.001	0.4	0.15		
	Central County	TPB	0.090	42.3	0.12		
A10A	Central County	GWD	0.001	0.5	0.35		
	Central County	GYD	0.043	22.9	0.26		
	Central County	PWB	0.054	28.7	0.38		
	Central County	TPB	0.090	47.9	0.12		
A11	Central County	CF	0.064	39.5	0.50		
	Central County	GM	0.098	60.5	0.29		
A11A	Central County	BE	0.028	4.8	0.24		
	Central County	GM	0.038	6.3	0.29		
	Central County	GWD	0.027	4.6	0.35		
	Central County	GYD	0.004	0.7	0.26		
	Central County	PT	0.101	16.9	0.40		
	Central County	PWB	0.303	51.0	0.38		
	Central County	TPB	0.015	2.6	0.12		
	Central County	VF	0.078	13.1	0.01		
A11B	Central County	CF	0.029	19.7	0.50		
	Central County	GM	0.000	0.1	0.29		
	Central County	PT	0.094	64.6	0.40		
	Central County	PWB	0.005	3.6	0.38		
	Central County	TPB	0.018	12.0	0.12		
A11C	Central County	CF	0.088	72.3	0.50		

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Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
	Central County	GM	0.034	27.7	0.29		
A11D	Central County	CF	0.019	13.0	0.50		
	Central County	PT	0.127	87.0	0.40		
A11E	Central County	CO	0.065	21.8	0.29	20.0	100
	Central County	GWD	0.012	4.0	0.35		
	Central County	PT	0.070	23.5	0.40		
	Central County	PWB	0.151	50.7	0.38		
A11F	Central County	CO	0.163	35.0	0.29	20.0	100
	Central County	CV	0.034	7.2	0.39		
	Central County	GWD	0.145	31.1	0.35		
	Central County	GYD	0.027	5.8	0.26		
	Central County	PWB	0.053	11.3	0.38		
	Central County	RS	0.045	9.6	0.40	65.0	100
A11G	Central County	CO	0.064	97.0	0.29	20.0	100
	Central County	PT	0.002	3.0	0.40		
A11H	Aguila/Carefree	110	0.014	19.5	*		
	Aguila/Carefree	13	0.022	30.9	*		
	Aguila/Carefree	18	0.006	8.2	*	*	
	Central County	PT	0.005	6.8	0.40		
	Central County	PWB	0.013	18.1	0.38		
	Central County	VF	0.012	16.6	0.01		
A11I	Central County	PT	0.042	15.2	0.40		
	Central County	PWB	0.034	12.3	0.38		
	Aguila/Carefree	110	0.068	24.3	0.13		
	Aguila/Carefree	13	0.124	44.3	0.01		
	Aguila/Carefree	18	0.011	3.9	0.33	15.0	100
A11J	Central County	PT	0.003	4.4	0.40		
	Aguila/Carefree	112	0.006	7.6	0.39		
	Aguila/Carefree	13	0.031	40.2	0.01		
	Aguila/Carefree	110	0.037	47.8	0.13		
A11K	Aguila/Carefree	110	0.040	13.3	0.13		
	Aguila/Carefree	112	0.066	22.2	0.39		
	Aguila/Carefree	18	0.044	14.7	0.33	15.0	100
	Central County	CO	0.050	16.8	0.29	20.0	100
	Central County	PT	0.098	33.0	0.40		
A11L	Aguila/Carefree	110	0.075	30.0	0.13		
	Aguila/Carefree	13	0.171	68.5	0.01		
	Aguila/Carefree	18	0.004	1.5	0.33	15.0	100
A11M	Aguila/Carefree	100	0.024	9.2	0.40	20.0	100
	Aguila/Carefree	110	0.134	51.9	0.13		
	Aguila/Carefree	13	0.100	38.9	0.01		
A11N	Aguila/Carefree	100	0.006	7.3	0.40	20.0	100
	Aguila/Carefree	110	0.076	92.7	0.13		
A11O	Aguila/Carefree	100	0.004	6.9	0.40	20.0	100
	Aguila/Carefree	110	0.053	93.1	0.13		

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* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A21A	Maricopa	C_CO	0.012	14.7	0.29	20.0	100
	Maricopa	C_EBD	0.017	20.2	0.10		
	Maricopa	C_PSB	0.007	8.9	0.26		
	Maricopa	C_PT	0.002	2.9	0.40		
	Maricopa	C_RS	0.044	53.3	0.40	65.0	100
A21AA	Maricopa	C_ES	0.000	0.9	0.25		
	Maricopa	C_MR	0.007	68.5	0.05		
	Maricopa	C_VF	0.003	30.6	0.01		
A21AB	Maricopa	C_MR	0.017	46.9	0.05		
	Maricopa	C_TD	0.001	3.1	1.20		
	Maricopa	C_TW	0.011	30.0	0.05		
	Maricopa	C_VF	0.007	20.0	0.01		
A21AC	Maricopa	C_MR	0.001	4.5	0.05		
	Maricopa	C_TW	0.021	93.2	0.05		
	Maricopa	C_VF	0.001	2.3	0.01		
A21AD	Maricopa	C_ES	0.005	9.7	0.25		
	Maricopa	C_MR	0.024	44.9	0.05		
	Maricopa	C_TW	0.016	30.2	0.05		
	Maricopa	C_VF	0.008	15.2	0.01		
A21AE	Maricopa	C_AE	0.000	0.4	0.39		
	Maricopa	C_ES	0.017	35.5	0.25		
	Maricopa	C_GE	0.003	5.3	0.26		
	Maricopa	C_LE	0.003	7.0	0.04		
	Maricopa	C_MR	0.007	14.4	0.05		
	Maricopa	C_TE	0.000	0.2	0.25		
	Maricopa	C_TW	0.018	37.2	0.05		
A21AF	Maricopa	C_ES	0.004	100.0	0.25		
A21AG	Maricopa	C_ES	0.024	76.9	0.25		
	Maricopa	C_MP	0.001	2.3	0.25		
	Maricopa	C_MR	0.006	19.8	0.05		
	Maricopa	C_TW	0.000	1.0	0.05		
A21AH	Maricopa	C_ES	0.008	30.3	0.25		
	Maricopa	C_MP	0.017	68.5	0.25		
	Maricopa	C_TW	0.000	1.2	0.05		
A21AI	Maricopa	C_MP	0.007	100.0	0.25		
A21AJ	Maricopa	C_MP	0.010	93.7	0.25		
	Maricopa	C_TE	0.001	6.3	0.25		
A21AK	Maricopa	C_ES	0.017	38.9	0.25		
	Maricopa	C_MP	0.026	61.1	0.25		
A21B	Maricopa	C_AE	0.006	29.1	*		
	Maricopa	C_EBD	0.004	19.1	*		
	Maricopa	C_RS	0.011	51.8	*	65.0	100
A21C	Maricopa	C_ABA	0.018	33.3	0.38		
	Maricopa	C_AE	0.029	53.5	0.39		
	Maricopa	C_EBD	0.005	9.2	0.10		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A21C	Maricopa	C_GE	0.001	2.1	0.26		
	Maricopa	C_RS	0.001	2.1	0.40	65.0	100
A21D	Maricopa	C_RS	0.019	100.0	0.40	65.0	100
A21E	Maricopa	C_ABA	0.003	5.5	0.38		
	Maricopa	C_AE	0.025	43.0	0.39		
	Maricopa	C_EBD	0.007	11.2	0.10		
	Maricopa	C_GE	0.010	17.8	0.26		
	Maricopa	C_RS	0.013	22.5	0.40	65.0	100
A21F	Maricopa	C_RS	0.046	100.0	0.40	65.0	100
A21G	Maricopa	C_AE	0.002	5.8	0.39		
	Maricopa	C_EBD	0.015	35.6	0.10		
	Maricopa	C_GE	0.009	21.3	0.26		
	Maricopa	C_RS	0.015	37.3	0.40	65.0	100
A21H	Maricopa	C_EBD	0.006	86.5	0.10		
	Maricopa	C_GE	0.000	1.4	0.26		
	Maricopa	C_GGA	0.001	12.2	0.25		
A21I	Maricopa	C_EBD	0.004	10.5	0.10		
	Maricopa	C_LCA	0.008	22.0	0.25		
	Maricopa	C_RS	0.025	67.6	0.40	65.0	100
A21J	Maricopa	C_ADA	0.007	6.0	0.40		
	Maricopa	C_AE	0.001	1.1	0.39		
	Maricopa	C_EBD	0.018	16.1	0.10		
	Maricopa	C_GE	0.003	2.7	0.26		
	Maricopa	C_GGA	0.009	8.3	0.25		
	Maricopa	C_LCA	0.056	50.2	0.25		
	Maricopa	C_RS	0.018	15.7	0.40	65.0	100
A21K	Maricopa	C_AA	0.000	0.1	0.26		
	Maricopa	C_ABA	0.003	4.4	0.38		
	Maricopa	C_AE	0.020	30.0	0.39		
	Maricopa	C_GE	0.044	64.9	0.26		
	Maricopa	C_GGA	0.000	0.4	0.25		
A21L	Maricopa	C_AA	0.001	2.8	0.26		
	Maricopa	C_AE	0.000	1.4	0.39		
	Maricopa	C_GE	0.020	70.1	0.26		
	Maricopa	C_GGA	0.007	25.6	0.25		
A21M	Maricopa	C_AA	0.004	23.2	0.26		
	Maricopa	C_GE	0.006	37.8	0.26		
	Maricopa	C_GGA	0.006	39.0	0.25		
A21N	Maricopa	C_AA	0.003	1.1	0.26		
	Maricopa	C_AE	0.035	13.6	0.39		
	Maricopa	C_ES	0.020	7.9	0.25		
	Maricopa	C_GE	0.082	31.7	0.26		
	Maricopa	C_GGA	0.050	19.4	0.25		
	Maricopa	C_LCA	0.063	24.2	0.25		
	Maricopa	C_TE	0.005	2.1	0.25		
A21O	Maricopa	C_ES	0.003	26.9	0.25		

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* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
	Maricopa	C_LCA	0.003	27.8	0.25		
	Maricopa	C_MP	0.002	14.8	0.25		
	Maricopa	C_TE	0.003	30.6	0.25		
A21P	Maricopa	C_ES	0.017	47.0	0.25		
	Maricopa	C_MP	0.001	1.4	0.25		
	Maricopa	C_MR	0.009	26.2	0.05		
	Maricopa	C_TW	0.003	7.7	0.05		
	Maricopa	C_VF	0.006	17.7	0.01		
A21Q	Maricopa	C_AA	0.001	1.2	0.26		
	Maricopa	C_ABA	0.003	6.7	0.38		
	Maricopa	C_AE	0.002	5.3	0.39		
	Maricopa	C_ES	0.022	50.2	0.25		
	Maricopa	C_GE	0.005	12.3	0.26		
	Maricopa	C_GGA	0.010	24.2	0.25		
A21R	Maricopa	C_ES	0.008	98.8	0.25		
	Maricopa	C_GE	0.000	1.3	0.26		
A21S	Maricopa	C_ES	0.007	43.9	0.25		
	Maricopa	C_GE	0.008	56.1	0.26		
A21T	Maricopa	C_ES	0.022	58.7	0.25		
	Maricopa	C_GE	0.014	36.2	0.26		
	Maricopa	C_MR	0.002	5.0	0.05		
A21U	Maricopa	C_AE	0.004	3.0	0.39		
	Maricopa	C_ES	0.041	28.0	0.25		
	Maricopa	C_GE	0.032	22.0	0.26		
	Maricopa	C_GGA	0.023	15.6	0.25		
	Maricopa	C_LCA	0.009	6.3	0.25		
	Maricopa	C_MP	0.025	17.3	0.25		
	Maricopa	C_TE	0.011	7.9	0.25		
A21V	Maricopa	C_ES	0.006	15.5	0.25		
	Maricopa	C_GGA	0.007	17.7	0.25		
	Maricopa	C_MP	0.002	4.0	0.25		
	Maricopa	C_MR	0.009	22.8	0.05		
	Maricopa	C_TW	0.007	18.2	0.05		
	Maricopa	C_VF	0.008	21.7	0.01		
A21W	Maricopa	C_AA	0.003	16.0	0.26		
	Maricopa	C_AE	0.000	0.6	0.39		
	Maricopa	C_ES	0.001	3.4	0.25		
	Maricopa	C_GE	0.012	70.9	0.26		
	Maricopa	C_GGA	0.002	9.1	0.25		
A21X	Maricopa	C_ES	0.018	76.3	0.25		
	Maricopa	C_MR	0.006	23.7	0.05		
A21Y	Maricopa	C_MR	0.009	18.5	0.05		
	Maricopa	C_TD	0.006	12.4	1.20		
	Maricopa	C_TW	0.034	68.1	0.05		
	Maricopa	C_VF	0.001	1.0	0.01		
A21Z	Maricopa	C_CRB	0.004	6.0	0.40		

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Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A21Z	Maricopa	C_MR	0.003	4.2	0.05		
	Maricopa	C_TD	0.017	26.3	1.20		
	Maricopa	C_TE	0.006	9.8	0.25		
	Maricopa	C_TW	0.030	46.3	0.05		
	Maricopa	C_VF	0.005	7.4	0.01		
A99	Central County	BR	0.097	72.0	1.05		
	Central County	VG	0.038	28.0	0.91		
A99A	Central County	BR	0.083	65.4	1.05		
	Central County	CB	0.016	12.7	0.40		
	Central County	TD	0.028	21.9	1.20		
A99B	Central County	BR	0.011	20.7	1.05		
	Central County	CB	0.030	58.1	0.40		
	Central County	GP	0.000	0.2	*		
	Central County	TD	0.011	21.1	1.20		
A99C	Central County	BR	0.027	96.8	1.05		
	Central County	CB	0.001	3.2	0.40		
A99D	Central County	BR	0.008	25.5	1.05		
	Central County	CB	0.021	69.2	0.40		
	Central County	TD	0.002	5.3	1.20		
A99E	Central County	BR	0.001	3.8	1.05		
	Central County	CB	0.020	82.0	0.40		
	Central County	TD	0.003	14.2	1.20		
A99F	Central County	BR	0.041	36.8	1.05		
	Central County	CB	0.034	30.5	0.40		
	Central County	TD	0.036	32.1	1.20		
	Central County	VG	0.001	0.6	0.91		
A99G	Central County	BR	0.007	31.3	1.05		
	Central County	CB	0.014	66.4	0.40		
	Central County	TD	0.001	2.3	1.20		
A99H	Central County	BR	0.077	76.2	1.05		
	Central County	CB	0.021	20.4	0.40		
	Central County	VG	0.004	3.5	0.91		
A99I	Central County	CA2	0.041	28.8	0.38		
	Central County	CB	0.000	0.1	0.40		
	Central County	LCA	0.021	14.7	0.25		
	Central County	PEA	0.079	55.2	0.37		
	Central County	VF	0.002	1.2	0.01		
A99J	Central County	CA2	0.021	15.4	0.38		
	Central County	CB	0.000	0.1	0.40		
	Central County	LCA	0.019	13.7	0.25		
	Central County	PEA	0.097	70.9	0.37		
A99K	Central County	CA2	0.025	24.0	0.38		
	Central County	LCA	0.010	9.6	0.25		
	Central County	PEA	0.066	61.9	0.37		
	Central County	TW	0.004	3.5	0.05		
	Central County	VG	0.001	1.0	0.91		

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Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A99L	Central County	CA2	0.019	24.8	0.38		
	Central County	PEA	0.052	67.0	0.37		
	Central County	VG	0.006	8.2	0.91		
A99M	Central County	CA2	0.016	26.2	0.38		
	Central County	PEA	0.027	45.8	0.37		
	Central County	TD	0.000	0.5	1.20		
	Central County	TW	0.007	12.4	0.05		
	Central County	VG	0.009	15.1	0.91		
A99N	Central County	CA2	0.032	20.1	0.38		
	Central County	LCA	0.017	10.6	0.25		
	Central County	LE	0.008	5.1	0.04		
	Central County	PEA	0.033	20.4	0.37		
	Central County	TD	0.001	0.7	1.20		
	Central County	TW	0.069	43.1	0.05		
A99O	Central County	CA2	0.042	41.4	0.38		
	Central County	CB	0.002	1.8	0.40		
	Central County	LCA	0.001	1.3	0.25		
	Central County	PEA	0.031	30.5	0.37		
	Central County	TW	0.025	25.0	0.05		
A99P	Central County	ABA	0.063	10.9	0.38		
	Central County	CA2	0.054	9.5	0.38		
	Central County	CB	0.038	6.7	0.40		
	Central County	GGA	0.039	6.8	0.25		
	Central County	GP	0.001	0.2	*		
	Central County	LCA	0.188	32.7	0.25		
	Central County	LE	0.103	17.9	0.04		
	Central County	MR	0.002	0.3	0.05		
	Central County	PEA	0.041	7.1	0.37		
	Central County	RBA	0.001	0.2	0.26		
	Central County	TD	0.002	0.4	1.20		
	Central County	TW	0.036	6.2	0.05		
	Central County	VH	0.007	1.1	0.27		
A99Q	Central County	CB	0.094	80.0	0.40		
	Central County	GGA	0.003	2.1	0.25		
	Central County	TD	0.021	17.8	1.20		
A99R	Central County	CB	0.019	50.9	0.40		
	Central County	TD	0.004	11.1	1.20		
	Central County	VG	0.009	23.0	0.91		
	Central County	VH	0.006	14.9	0.27		
A99S	Central County	BR	0.004	5.0	1.05		
	Central County	CB	0.063	81.2	0.40		
	Central County	TD	0.011	13.6	1.20		
	Central County	VG	0.000	0.1	0.91		
A99T	Central County	BR	0.013	43.1	1.05		
	Central County	CB	0.006	20.2	0.40		
	Central County	TD	0.011	36.7	1.20		
A99U	Central County	ABA	0.018	25.3	0.38		

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Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
A99U	Central County	BR	0.011	16.3	1.05		
	Central County	CA2	0.004	5.4	0.38		
	Central County	CB	0.014	20.5	0.40		
	Central County	MA	0.006	8.3	0.40		
	Central County	TD	0.003	3.6	1.20		
	Central County	TFA	0.014	20.6	0.37		
A99V	Central County	ABA	0.010	5.0	0.38		
	Central County	CA2	0.012	5.6	0.38		
	Central County	CB	0.006	2.8	0.40		
	Central County	CF	0.000	0.1	0.50		
	Central County	TD	0.002	0.8	1.20		
	Central County	TFA	0.011	5.3	0.37		
	Central County	TPB	0.166	80.4	0.12		
A99W	Central County	CF	0.006	2.6	0.50		
	Central County	MTB	0.008	3.9	0.15		
	Central County	TPB	0.201	93.5	0.12		
A99X	Central County	CF	0.204	77.1	0.50		
	Central County	TPB	0.060	22.9	0.12		
A99Y	Central County	CF	0.148	46.6	0.50		
	Central County	GM	0.047	14.9	0.29		
	Central County	GWD	0.011	3.4	0.35		
	Central County	GYD	0.020	6.3	0.26		
	Central County	PWB	0.035	10.9	0.38		
	Central County	TPB	0.057	17.9	0.12		
A99Z	Central County	CF	0.014	9.2	0.50		
	Central County	PT	0.072	46.2	0.40		
	Aguila/Carefree	10	0.000	0.1	0.94		
	Aguila/Carefree	110	0.026	17.0	0.13		
	Aguila/Carefree	18	0.043	27.5	0.33	15.0	100
N01	Central County	ABB	0.000		0.39		
	Central County	BR	0.080	12.4	1.05		
	Central County	BS	0.015	2.3	0.39		
	Central County	CA2	0.032	4.9	0.38		
	Central County	CB	0.020	3.1	0.40		
	Central County	CO	0.091	14.1	0.29	20.0	100
	Central County	CP	0.093	14.4	0.40		
	Central County	GGA	0.014	2.1	0.25		
	Central County	MA	0.043	6.6	0.40		
	Central County	RPE	0.018	2.8	0.29		
	Central County	TD	0.032	4.9	1.20		
	Central County	VH	0.170	26.2	0.27		
	Central County	VK	0.040	6.1	0.26		
N01A	Central County	ABB	0.007	1.8	0.39		
	Central County	BR	0.259	62.8	1.05		
	Central County	BS	0.009	2.1	0.39		
	Central County	CB	0.006	1.4	0.40		
	Central County	CO	0.012	2.8	0.29	20.0	100
	Central County	GE	0.023	5.5	0.26		
	Central County	GGA	0.011	2.5	0.25		

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Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N01A	Central County	MA	0.050	12.0	0.40		
	Central County	VG	0.008	1.8	0.91		
	Central County	VH	0.030	7.3	0.27		
N02	Central County	AA	0.044	5.8	0.26		
	Central County	AO	0.045	5.9	0.04		
	Central County	BR	0.024	3.2	1.05		
	Central County	BS	0.050	6.6	0.39		
	Central County	CA2	0.005	0.6	0.38		
	Central County	CB	0.015	2.0	0.40		
	Central County	CP	0.021	2.7	0.40		
	Central County	GGA	0.189	24.9	0.25		
	Central County	GP	0.004	0.6	*		
	Central County	GT	0.061	8.0	0.04		
	Central County	LCA	0.001	0.1	0.25		
	Central County	MR	0.073	9.6	0.05		
	Central County	PEA	0.041	5.4	0.37		
	Central County	RBA	0.053	6.9	0.26		
	Central County	RPE	0.008	1.1	0.29		
	Central County	TD	0.094	12.4	1.20		
	Central County	VF	0.013	1.7	0.01		
	Central County	VK	0.018	2.4	0.26		
N02A	Central County	CA2	0.070	39.2	0.38		
	Central County	CB	0.013	7.1	0.40		
	Central County	CO	0.066	37.2	0.29	20.0	100
	Central County	GGA	0.013	7.5	0.25		
	Central County	RPE	0.005	2.9	0.29		
	Central County	VH	0.004	2.0	0.27		
	Central County	VK	0.007	4.1	0.26		
N02B	Central County	CA2	0.001	0.5	0.38		
	Central County	CO	0.007	4.6	0.29	20.0	100
	Central County	GGA	0.005	3.2	0.25		
	Central County	LCA	0.072	47.5	0.25		
	Central County	PEA	0.067	43.8	0.37		
	Central County	RBA	0.000	0.3	0.26		
	Central County	RPE	0.000	0.1	0.29		
N03	Central County	AA	0.003	0.6	0.26		
	Central County	AO	0.006	1.0	0.04		
	Central County	BR	0.003	0.5	1.05		
	Central County	BS	0.057	9.5	0.39		
	Central County	CB	0.064	10.6	0.40		
	Central County	GE	0.020	3.3	0.26		
	Central County	GGA	0.073	12.1	0.25		
	Central County	GP	0.007	1.1	*		
	Central County	GT	0.007	1.2	0.04		
	Central County	GXA	0.040	6.6	0.23		
	Central County	LCA	0.013	2.1	0.25		
	Central County	MA	0.010	1.7	0.40		
	Central County	RAA	0.074	12.2	0.39		
	Central County	RBA	0.139	22.9	0.26		
	Central County	TC	0.006	1.0	0.40		
	Central County	TD	0.082	13.6	1.20		

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Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N03A	Central County	GXA	0.031	8.0	0.23		
	Central County	LB	0.031	8.0	0.40		
	Central County	LCA	0.046	11.7	0.25		
	Central County	PEA	0.139	35.7	0.37		
	Central County	RBA	0.139	35.6	0.26		
	Central County	TC	0.004	1.0	0.40		
N03B	Central County	AO	0.071	11.3	0.04		
	Central County	CP	0.006	1.0	0.40		
	Central County	GGA	0.030	4.7	0.25		
	Central County	GT	0.103	16.4	0.04		
	Central County	GXA	0.017	2.7	0.23		
	Central County	LCA	0.036	5.7	0.25		
	Central County	MR	0.259	41.3	0.05		
	Central County	RBA	0.010	1.6	0.26		
	Central County	TT	0.015	2.3	0.04		
	Central County	TW	0.073	11.6	0.05		
	Central County	VF	0.008	1.3	0.01		
N04	Central County	AO	0.038	4.5	0.04		
	Central County	CB	0.079	9.5	0.40		
	Central County	GE	0.042	5.1	0.26		
	Central County	GGA	0.187	22.6	0.25		
	Central County	GP	0.009	1.1	*		
	Central County	GT	0.080	9.6	0.04		
	Central County	LCA	0.007	0.9	0.25		
	Central County	LE	0.080	9.7	0.04		
	Central County	MR	0.088	10.6	0.05		
	Central County	RBA	0.035	4.2	0.26		
	Central County	TD	0.079	9.6	1.20		
	Central County	TG	0.014	1.7	0.04		
	Central County	TH	0.004	0.5	0.04		
	Central County	TW	0.021	2.5	0.05		
	Central County	VF	0.009	1.1	0.01		
	Central County	VH	0.049	5.9	0.27		
	Central County	VK	0.005	0.6	0.26		
N04A	Central County	CB	0.011	16.8	0.40		
	Central County	GXA	0.003	4.8	0.23		
	Central County	LCA	0.018	27.2	0.25		
	Central County	PEA	0.020	30.5	0.37		
	Central County	RBA	0.010	15.0	0.26		
	Central County	TD	0.004	5.7	1.20		
N05	Central County	AA	0.023	8.5	0.26		
	Central County	ABA	0.030	11.0	0.38		
	Central County	AO	0.027	9.7	0.04		
	Central County	BR	0.011	3.8	1.05		
	Central County	BS	0.019	6.8	0.39		
	Central County	BT	0.005	1.7	0.25		
	Central County	CB	0.025	9.1	0.40		
	Central County	GE	0.017	6.2	0.26		
	Central County	GGA	0.020	7.4	0.25		
	Central County	LCA	0.012	4.2	0.25		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N05	Central County	MA	0.018	6.5	0.40		
	Central County	MR	0.008	2.7	0.05		
	Central County	PEA	0.000	0.1	0.37		
	Central County	TD	0.051	18.5	1.20		
	Central County	TW	0.002	0.8	0.05		
	Central County	VG	0.008	2.9	0.91		
N05A	Central County	CB	0.007	3.8	0.40		
	Central County	GGA	0.008	4.7	0.25		
	Central County	GXA	0.003	1.8	0.23		
	Central County	LCA	0.122	70.0	0.25		
	Central County	MP	0.001	0.5	0.25		
	Central County	PEA	0.025	14.2	0.37		
	Central County	TD	0.003	1.7	1.20		
	Central County	VG	0.006	3.2	0.91		
N05B	Central County	LCA	0.302	96.0	0.25		
	Central County	PEA	0.000	0.1	0.37		
	Central County	TW	0.012	3.9	0.05		
N05C	Central County	ES	0.022	8.0	0.25		
	Central County	GXA	0.005	1.8	0.23		
	Central County	LCA	0.150	54.1	0.25		
	Central County	MP	0.024	8.7	0.25		
	Central County	MR	0.031	11.1	0.05		
	Central County	PEA	0.027	9.6	0.37		
	Central County	TW	0.015	5.5	0.05		
	Central County	VG	0.003	1.2	0.91		
N06	Central County	AA	0.014	2.3	0.26		
	Central County	ABA	0.009	1.6	0.38		
	Central County	CB	0.119	19.9	0.40		
	Central County	ES	0.023	3.8	0.25		
	Central County	GE	0.045	7.5	0.26		
	Central County	GGA	0.118	19.8	0.25		
	Central County	LCA	0.059	10.0	0.25		
	Central County	MA	0.019	3.2	0.40		
	Central County	MR	0.014	2.3	0.05		
	Central County	PEA	0.016	2.6	0.37		
	Central County	RBA	0.004	0.6	0.26		
	Central County	TD	0.083	13.9	1.20		
	Central County	VH	0.047	7.8	0.27		
	Central County	VK	0.027	4.6	0.26		
N07	Central County	AA	0.139	18.5	0.26		
	Central County	CB	0.058	7.8	0.40		
	Central County	GGA	0.085	11.4	0.25		
	Central County	LCA	0.102	13.6	0.25		
	Central County	MA	0.002	0.2	0.40		
	Central County	MR	0.067	8.9	0.05		
	Central County	PEA	0.209	28.0	0.37		
	Central County	RBA	0.000		0.26		
	Central County	TD	0.074	9.9	1.20		
	Central County	VF	0.003	0.4	0.01		
	Central County	VK	0.010	1.3	0.26		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N07A	Central County	AA	0.062	17.3	0.26		
	Central County	CRB	0.011	3.0	0.40		
	Central County	GGA	0.181	50.8	0.25		
	Central County	GR	0.010	2.8	0.23		
	Central County	LCA	0.021	5.9	0.25		
	Central County	LE	0.001	0.2	0.04		
	Central County	PEA	0.036	10.0	0.37		
	Central County	RBA	0.010	2.8	0.26		
	Central County	VA	0.012	3.4	0.39		
	Central County	VF	0.001	0.3	0.01		
	Central County	VK	0.012	3.5	0.26		
N08	Central County	AA	0.140	17.8	0.26		
	Central County	ABA	0.082	10.5	0.38		
	Central County	AFA	0.148	18.8	0.38		
	Central County	BS	0.001	0.2	0.39		
	Central County	CB	0.038	4.8	0.40		
	Central County	GGA	0.092	11.7	0.25		
	Central County	LCA	0.019	2.4	0.25		
	Central County	MA	0.128	16.3	0.40		
	Central County	MO	0.000	0.1	0.39		
	Central County	RBA	0.004	0.5	0.26		
	Central County	TD	0.048	6.1	1.20		
	Central County	VA	0.004	0.5	0.39		
	Central County	VH	0.083	10.6	0.27		
N08A	Central County	AFA	0.554	75.4	0.38		
	Central County	CB	0.000		0.40		
	Central County	GGA	0.023	3.1	0.25		
	Central County	LCA	0.060	8.1	0.25		
	Central County	MA	0.013	1.8	0.40		
	Central County	MR	0.009	1.3	0.05		
	Central County	RBA	0.055	7.4	0.26		
	Central County	TG	0.004	0.5	0.04		
	Central County	TH	0.017	2.3	0.04		
N08B	Central County	AFA	0.250	35.7	0.38		
	Central County	ES	0.001	0.1	0.25		
	Central County	LCA	0.084	12.1	0.25		
	Central County	LE	0.016	2.2	0.04		
	Central County	MP	0.025	3.5	0.25		
	Central County	MR	0.287	41.1	0.05		
	Central County	RBA	0.021	3.0	0.26		
	Central County	VE	0.001	0.2	0.25		
	Central County	VF	0.015	2.1	0.01		
N09	Central County	AA	0.008	1.2	0.26		
	Central County	ABA	0.030	4.6	0.38		
	Central County	BS	0.021	3.3	0.39		
	Central County	CB	0.069	10.6	0.40		
	Central County	ES	0.008	1.3	0.25		
	Central County	GGA	0.031	4.8	0.25		
	Central County	GP	0.012	1.9	*		
	Central County	LCA	0.253	39.0	0.25		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N09	Central County	LE	0.005	0.7	0.04		
	Central County	MP	0.043	6.7	0.25		
	Central County	MR	0.037	5.7	0.05		
	Central County	PEA	0.000		0.37		
	Central County	RBA	0.011	1.6	0.26		
	Central County	TD	0.063	9.6	1.20		
	Central County	TW	0.027	4.1	0.05		
	Central County	VA	0.005	0.7	0.39		
	Central County	VF	0.005	0.8	0.01		
	Central County	VH	0.023	3.5	0.27		
N10	Central County	GXA	0.015	2.9	0.23		
	Central County	LCA	0.162	32.9	0.25		
	Central County	LE	0.008	1.6	0.04		
	Central County	MR	0.070	14.1	0.05		
	Central County	PEA	0.154	31.2	0.37		
	Central County	RBA	0.031	6.3	0.26		
	Central County	TH	0.022	4.5	0.04		
	Central County	TW	0.031	6.4	0.05		
N11	Central County	ES	0.033	3.7	0.25		
	Central County	GGA	0.010	1.1	0.25		
	Central County	GXA	0.121	13.5	0.23		
	Central County	LCA	0.105	11.7	0.25		
	Central County	MP	0.026	2.9	0.25		
	Central County	MR	0.495	55.1	0.05		
	Central County	MS	0.009	0.9	0.01		
	Central County	PEA	0.004	0.4	0.37		
	Central County	PT	0.029	3.2	0.40		
	Central County	RBA	0.041	4.6	0.26		
	Central County	TD	0.001	0.1	1.20		
	Central County	TG	0.000		0.04		
	Central County	TH	0.005	0.5	0.04		
	Central County	TW	0.001	0.1	0.05		
	Central County	VE	0.021	2.3	0.25		
N11C	Central County	GXA	0.000		0.23		
	Central County	LCA	0.083	32.4	0.25		
	Central County	MP	0.023	9.2	0.25		
	Central County	MTB	0.000		0.15		
	Central County	PSA	0.019	7.5	0.25		
	Central County	PT	0.119	46.6	0.40		
	Central County	VE	0.011	4.3	0.25		
N11D	Central County	GXA	0.009	1.7	0.23		
	Central County	LCA	0.334	65.5	0.25		
	Central County	MP	0.016	3.1	0.25		
	Central County	PT	0.121	23.7	0.40		
	Central County	TE	0.031	6.0	0.25		
N11E	Central County	GXA	0.002	0.5	0.23		
	Central County	LCA	0.296	60.4	0.25		
	Central County	MP	0.019	4.0	0.25		
	Central County	MR	0.088	17.9	0.05		
	Central County	PT	0.003	0.7	0.40		

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Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N11E	Central County	TE	0.018	3.7	0.25		
	Central County	TG	0.023	4.8	0.04		
	Central County	TU	0.012	2.4	0.25		
	Central County	TW	0.028	5.7	0.05		
N11F	Central County	LCA	0.054	22.3	0.25		
	Central County	MP	0.006	2.6	0.25		
	Central County	PSA	0.001	0.5	0.25		
	Central County	PT	0.112	45.9	0.40		
	Central County	PWB	0.006	2.3	0.38		
	Central County	TE	0.003	1.2	0.25		
	Central County	VE	0.062	25.3	0.25		
N11G	Central County	LCA	0.034	6.4	0.25		
	Central County	PSA	0.008	1.5	0.25		
	Central County	PT	0.162	30.9	0.40		
	Central County	PWB	0.168	32.1	0.38		
	Central County	TE	0.072	13.8	0.25		
	Central County	VE	0.080	15.2	0.25		
N11H	Central County	CV	0.024	5.0	0.39		
	Central County	LCA	0.240	50.0	0.25		
	Central County	MP	0.019	4.0	0.25		
	Central County	PEA	0.006	1.1	0.37		
	Central County	PT	0.042	8.7	0.40		
	Central County	PWB	0.128	26.7	0.38		
	Central County	TE	0.022	4.5	0.25		
N11I	Central County	CV	0.015	2.4	0.39		
	Central County	GN	0.075	12.1	0.25		
	Central County	LCA	0.310	50.3	0.25		
	Central County	MP	0.049	7.9	0.25		
	Central County	MR	0.158	25.5	0.05		
	Central County	PT	0.002	0.2	0.40		
	Central County	TU	0.003	0.4	0.25		
	Central County	VF	0.007	1.1	0.01		
N11J	Central County	CV	0.003	1.1	0.39		
	Central County	PWB	0.241	98.9	0.38		
N11K	Central County	CV	0.104	56.1	0.39		
	Central County	GN	0.047	25.4	0.25		
	Central County	PWB	0.034	18.5	0.38		
N11L	Central County	CV	0.012	4.0	*		
	Central County	GN	0.241	82.4	*		
	Central County	PWB	0.040	13.6	*		
N11M	Central County	CV	0.037	37.0	0.39		
	Central County	GN	0.010	10.0	0.25		
	Central County	PWB	0.053	53.0	0.38		
N11N	Central County	CV	0.002	0.9	0.39		
	Central County	GN	0.121	45.6	0.25		
	Central County	GYD	0.003	1.1	0.26		
	Central County	PWB	0.129	48.7	0.38		

* Custom Value (not default value)

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Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N11N	Central County	RS	0.010	3.7	0.40	65.0	100
N11O	Central County	CV	0.021	39.5	0.39		
	Central County	GN	0.031	57.4	0.25		
	Central County	GYD	0.001	2.6	0.26		
	Central County	PWB	0.000	0.6	0.38		
N11P	Central County	GWD	0.007	1.8	*		
	Central County	PWB	0.270	70.7	*		
	Central County	RS	0.105	27.5	*	65.0	100
N12	Central County	AA	0.009	1.7	0.26		
	Central County	AFA	0.070	13.8	0.38		
	Central County	CB	0.106	20.9	0.40		
	Central County	ES	0.007	1.4	0.25		
	Central County	GGA	0.000		0.25		
	Central County	GP	0.034	6.8	*		
	Central County	MA	0.004	0.8	0.40		
	Central County	MP	0.034	6.8	0.25		
	Central County	MR	0.171	33.7	0.05		
	Central County	TD	0.045	8.8	1.20		
	Central County	TG	0.019	3.6	0.04		
	Central County	VF	0.008	1.6	0.01		
N13	Central County	ABA	0.002	0.3	0.38		
	Central County	AFA	0.196	39.3	0.38		
	Central County	CB	0.043	8.7	0.40		
	Central County	CRB	0.002	0.5	0.40		
	Central County	ES	0.029	5.7	0.25		
	Central County	GP	0.002	0.4	*		
	Central County	LCA	0.001	0.3	0.25		
	Central County	LE	0.023	4.6	0.04		
	Central County	MA	0.048	9.6	0.40		
	Central County	MO	0.005	1.0	0.39		
	Central County	MP	0.036	7.2	0.25		
	Central County	MR	0.041	8.3	0.05		
	Central County	TD	0.027	5.4	1.20		
	Central County	TE	0.006	1.2	0.25		
	Central County	TW	0.023	4.7	0.05		
	Central County	VA	0.004	0.8	0.39		
	Central County	VE	0.002	0.4	0.25		
	Central County	VF	0.007	1.3	0.01		
	Central County	VH	0.001	0.2	0.27		
N14	Central County	AA	0.035	45.3	0.26		
	Central County	CB	0.002	2.9	0.40		
	Central County	GGA	0.016	20.7	0.25		
	Central County	MA	0.001	0.9	0.40		
	Central County	TD	0.023	30.3	1.20		
N14A	Central County	AA	0.005	1.1	0.26		
	Central County	CB	0.000	0.1	0.40		
	Central County	CP	0.011	2.4	0.40		
	Central County	GGA	0.049	11.0	0.25		
	Central County	LCA	0.148	33.3	0.25		

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* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N14A	Central County	MR	0.069	15.5	0.05		
	Central County	PEA	0.009	1.9	0.37		
	Central County	RBA	0.116	26.1	0.26		
	Central County	TG	0.000		0.04		
	Central County	TH	0.011	2.5	0.04		
	Central County	TU	0.014	3.0	0.25		
	Central County	TW	0.014	3.0	0.05		
N15	Central County	AA	0.001	0.1	0.26		
	Central County	CB	0.020	3.8	0.40		
	Central County	CP	0.004	0.7	0.40		
	Central County	ES	0.010	1.9	0.25		
	Central County	GGA	0.117	21.9	0.25		
	Central County	GXA	0.005	0.9	0.23		
	Central County	LCA	0.161	30.0	0.25		
	Central County	MP	0.006	1.2	0.25		
	Central County	MR	0.066	12.3	0.05		
	Central County	PEA	0.084	15.7	0.37		
	Central County	TD	0.032	6.0	1.20		
	Central County	TE	0.001	0.2	0.25		
	Central County	TH	0.027	5.0	0.04		
	Central County	VK	0.003	0.5	0.26		
N15A	Central County	CP	0.021	2.6	0.40		
	Central County	GXA	0.050	6.3	0.23		
	Central County	LCA	0.106	13.3	0.25		
	Central County	MP	0.062	7.8	0.25		
	Central County	MR	0.414	52.0	0.05		
	Central County	PEA	0.012	1.5	0.37		
	Central County	TU	0.052	6.6	0.25		
	Central County	TW	0.030	3.8	0.05		
	Central County	VF	0.049	6.1	0.01		
N15B	Central County	CP	0.010	1.4	0.40		
	Central County	CRB	0.007	0.9	0.40		
	Central County	ES	0.007	0.9	0.25		
	Central County	GXA	0.034	4.5	0.23		
	Central County	LCA	0.120	16.1	0.25		
	Central County	LE	0.080	10.7	0.04		
	Central County	MP	0.000	0.1	0.25		
	Central County	MR	0.129	17.3	0.05		
	Central County	PEA	0.013	1.8	0.37		
	Central County	RBA	0.029	3.9	0.26		
	Central County	TD	0.148	19.8	1.20		
	Central County	TE	0.043	5.8	0.25		
	Central County	TG	0.012	1.6	0.04		
	Central County	TH	0.004	0.5	0.04		
	Central County	TRA	0.006	0.8	0.11		
	Central County	TRB	0.016	2.1	0.13		
	Central County	TW	0.062	8.3	0.05		
	Central County	VF	0.027	3.5	0.01		
N16	Central County	AA	0.061	6.6	0.26		
	Central County	BS	0.004	0.4	0.39		
	Central County	BT	0.002	0.3	0.25		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N16	Central County	CB	0.021	2.3	0.40		
	Central County	CP	0.008	0.8	0.40		
	Central County	GGA	0.188	20.3	0.25		
	Central County	GXA	0.010	1.1	0.23		
	Central County	LCA	0.349	37.8	0.25		
	Central County	LCB	0.012	1.3	0.25		
	Central County	LE	0.005	0.6	0.04		
	Central County	MA	0.003	0.3	0.40		
	Central County	MP	0.012	1.3	0.25		
	Central County	MR	0.030	3.3	0.05		
	Central County	PEA	0.003	0.3	0.37		
	Central County	PEB	0.008	0.8	0.38		
	Central County	RBA	0.041	4.4	0.26		
	Central County	TA	0.002	0.2	0.25		
	Central County	TC	0.009	0.9	0.40		
	Central County	TD	0.032	3.5	1.20		
	Central County	TE	0.020	2.2	0.25		
	Central County	TG	0.010	1.1	0.04		
	Central County	TH	0.002	0.2	0.04		
	Central County	TRB	0.009	1.0	0.13		
	Central County	TU	0.010	1.1	0.25		
	Central County	TW	0.061	6.6	0.05		
	Central County	VF	0.009	1.0	0.01		
	Central County	VK	0.002	0.2	0.26		
N17	Central County	AA	0.046	11.1	0.26		
	Central County	ADB	0.000	0.1	0.40		
	Central County	BS	0.021	5.0	0.39		
	Central County	BT	0.009	2.1	0.25		
	Central County	CB	0.012	2.9	0.40		
	Central County	CP	0.026	6.4	0.40		
	Central County	CRB	0.020	4.7	0.40		
	Central County	GE	0.038	9.2	0.26		
	Central County	GGA	0.051	12.2	0.25		
	Central County	LB	0.003	0.8	0.40		
	Central County	LCA	0.058	13.9	0.25		
	Central County	LE	0.002	0.4	0.04		
	Central County	MA	0.007	1.7	0.40		
	Central County	MP	0.008	2.0	0.25		
	Central County	MR	0.000		0.05		
	Central County	PEA	0.003	0.7	0.37		
	Central County	TC	0.013	3.1	0.40		
	Central County	TD	0.021	5.1	1.20		
	Central County	TE	0.024	5.9	0.25		
	Central County	VF	0.012	2.9	0.01		
	Central County	VH	0.041	9.9	0.27		
N18	Central County	ADB	0.004	0.8	0.40		
	Central County	BS	0.019	3.7	0.39		
	Central County	BT	0.010	2.1	0.25		
	Central County	CB	0.015	3.1	0.40		
	Central County	GE	0.071	14.1	0.26		
	Central County	GGA	0.064	12.6	0.25		
	Central County	LB	0.029	5.8	0.40		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N18	Central County	LCA	0.125	24.8	0.25		
	Central County	MA	0.015	3.0	0.40		
	Central County	MP	0.013	2.6	0.25		
	Central County	MR	0.011	2.1	0.05		
	Central County	PA	0.008	1.6	0.40		
	Central County	PEB	0.008	1.5	0.38		
	Central County	TD	0.029	5.8	1.20		
	Central County	TE	0.006	1.2	0.25		
	Central County	TFA	0.009	1.7	0.37		
	Central County	TH	0.016	3.1	0.04		
	Central County	VF	0.039	7.8	0.01		
	Central County	VH	0.013	2.6	0.27		
N19A	Maricopa	C_ABA	0.004	0.8	0.38		
	Maricopa	C_AE	0.034	7.2	0.39		
	Maricopa	C_AFA	0.005	1.0	0.38		
	Maricopa	C_CO	0.092	19.8	0.29	20.0	100
	Maricopa	C_EBD	0.146	31.4	0.10		
	Maricopa	C_GE	0.003	0.6	0.26		
	Maricopa	C_GGA	0.004	0.9	0.25		
	Maricopa	C_GXB	0.000		0.24		
	Maricopa	C_LCB	0.002	0.3	0.25		
	Maricopa	C_RS	0.177	37.9	0.40	65.0	100
N19B	Central County	AFA	0.022	6.9	0.38		
	Central County	CO	0.122	38.2	0.29	20.0	100
	Central County	EBD	0.013	4.1	0.10		
	Central County	GXB	0.019	5.9	0.24		
	Central County	LCA	0.072	22.6	0.25		
	Central County	LCB	0.020	6.2	0.25		
	Central County	PEA	0.005	1.5	0.37		
	Central County	RS	0.047	14.6	0.40	65.0	100
N19C	Central County	AFA	0.033	4.4	0.38		
	Central County	CO	0.165	21.8	0.29	20.0	100
	Central County	LCA	0.298	39.5	0.25		
	Central County	LCB	0.043	5.7	0.25		
	Central County	PEA	0.074	9.8	0.37		
	Central County	PT	0.013	1.7	0.40		
	Central County	RBA	0.059	7.8	0.26		
	Central County	RS	0.071	9.4	0.40	65.0	100
N19D	Central County	AFA	0.038	9.6	0.38		
	Central County	AGB	0.021	5.4	0.40		
	Central County	CV	0.020	5.0	0.39		
	Aguila/Carefree	101	0.004	1.0	0.28		
	Aguila/Carefree	98	0.005	1.3	0.37		
	Central County	LCA	0.000	0.1	0.25		
	Central County	PEA	0.024	6.2	0.37		
	Central County	PRB	0.092	23.5	0.28		
	Central County	PT	0.027	6.8	0.40		
	Central County	RS	0.161	41.0	0.40	65.0	100
N19E	Aguila/Carefree	101	0.141	20.0	0.28		
	Aguila/Carefree	110	0.101	14.4	0.13		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N19E	Aguila/Carefree	18	0.145	20.7	0.33	15.0	100
	Aguila/Carefree	68	0.065	9.2	0.63		
	Aguila/Carefree	70	0.021	2.9	0.36		
	Central County	AGB	0.016	2.3	0.40		
	Central County	CO	0.035	5.0	0.29	20.0	100
	Central County	CV	0.020	2.8	0.39		
	Central County	PRB	0.003	0.5	0.28		
	Central County	RS	0.157	22.3	0.40	65.0	100
N19F	Aguila/Carefree	101	0.081	21.7	0.28		
	Aguila/Carefree	110	0.098	26.2	0.13		
	Aguila/Carefree	18	0.000		0.33	15.0	100
	Aguila/Carefree	70	0.006	1.5	0.36		
	Aguila/Carefree	98	0.083	22.1	0.37		
	Central County	AGB	0.002	0.6	0.40		
	Central County	CV	0.038	10.1	0.39		
	Central County	PRB	0.047	12.7	0.28		
	Central County	PT	0.015	4.1	0.40		
	Central County	RS	0.003	0.9	0.40	65.0	100
N20	Central County	AFA	0.086	24.1	0.38		
	Central County	CB	0.069	19.3	0.40		
	Central County	GGA	0.008	2.3	0.25		
	Central County	LE	0.009	2.6	0.04		
	Central County	MR	0.084	23.6	0.05		
	Central County	TD	0.067	18.8	1.20		
	Central County	TG	0.005	1.4	0.04		
	Central County	VH	0.028	7.9	0.27		
N21	Central County	AA	0.015	2.5	0.26		
	Central County	ABA	0.011	1.8	0.38		
	Central County	AFA	0.158	25.4	0.38		
	Central County	BS	0.000		0.39		
	Central County	CB	0.086	13.8	0.40		
	Central County	ES	0.001	0.2	0.25		
	Central County	GE	0.062	9.9	0.26		
	Central County	GGA	0.018	2.9	0.25		
	Central County	MA	0.009	1.4	0.40		
	Central County	MO	0.005	0.8	0.39		
	Central County	MP	0.019	3.1	0.25		
	Central County	MR	0.118	19.0	0.05		
	Central County	TD	0.086	13.8	1.20		
	Central County	TE	0.003	0.4	0.25		
	Central County	VE	0.002	0.4	0.25		
	Central County	VF	0.000	0.1	0.01		
	Central County	VH	0.028	4.5	0.27		
N21A1	Central County	GGA	0.003	15.4	*		
	Central County	MR	0.011	53.3	0.05		
	Central County	LCA	0.007	31.3	*		
N21A10	Central County	LCA	0.003	6.0	*		
	Central County	VF	0.009	19.7	*		
	Central County	MP	0.019	43.4	*		
	Central County	MR	0.013	30.9	*		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N21A11	Central County	VF	0.004	23.8	*		
	Central County	MR	0.012	76.2	*		
N21A12	Central County	VF	0.009	69.5	*		
	Central County	LCA	0.002	16.8	*		
	Central County	MR	0.002	13.0	*		
	Central County	MP	0.000	0.8	*		
N21A13	Central County	LCA	0.007	31.9	*		
	Central County	MP	0.014	68.1	*		
N21A14	Central County	MP	0.029	48.6	*		
	Central County	MR	0.004	7.1	*		
	Central County	LCA	0.014	22.7	*		
	Central County	VF	0.013	21.6	*		
N21A15	Central County	MP	0.013	85.4	*		
	Central County	MR	0.002	14.6	*		
N21A16	Central County	MR	0.007	33.0	*		
	Central County	MP	0.015	67.0	*		
N21A17	Central County	MR	0.002	18.2	*		
	Central County	MP	0.007	65.5	*		
	Central County	LCA	0.002	16.4	*		
N21A18	Central County	MP	0.014	57.8	*		
	Central County	MR	0.011	42.2	*		
N21A19	Central County	MP	0.006	100.0	*		
N21A2	Central County	LCA	0.007	80.0	*		
	Central County	MR	0.002	20.0	*		
N21A20	Central County	MP	0.003	100.0	*		
N21A21	Central County	MP	0.007	47.7	*		
	Central County	MR	0.008	52.3	*		
N21A22	Central County	LCA	0.003	38.9	*		
	Central County	ES	0.001	13.9	*		
	Central County	MR	0.001	12.5	*		
	Central County	MP	0.002	31.9	*		
	Central County	VF	0.000	2.8	*		
N21A23	Central County	LCA	0.018	71.7	*		
	Central County	VE	0.002	6.8	*		
	Central County	ES	0.001	4.0	*		
	Central County	MP	0.004	17.5	*		
N21A24	Central County	LCA	0.012	67.6	*		
	Central County	MP	0.006	32.4	*		
N21A25	Central County	LCA	0.004	100.0	*		
N21A26	Central County	LCA	0.024	94.1	*		
	Central County	MP	0.002	5.9	*		
N21A27	Central County	LCA	0.001	35.9	*		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N21A27	Central County	MP	0.003	64.1	*		
N21A28	Central County	MP	0.003	42.9	*		
	Central County	LCA	0.001	20.6	*		
	Central County	MR	0.000	3.2	*		
	Central County	ES	0.002	33.3	*		
N21A29	Central County	ES	0.001	4.2	*		
	Central County	LCA	0.015	91.1	*		
	Central County	MP	0.001	4.8	*		
N21A3	Central County	LCA	0.005	33.5	*		
	Central County	MR	0.009	56.3	*		
	Central County	VF	0.002	10.1	*		
N21A30	Central County	MP	0.005	20.2	*		
	Central County	LCA	0.003	11.8	*		
	Central County	ES	0.012	51.7	*		
	Central County	VF	0.004	16.4	*		
N21A31	Central County	ES	0.006	33.9	*		
	Central County	LCA	0.001	6.7	*		
	Central County	MP	0.010	59.4	*		
N21A32	Central County	LCA	0.003	74.4	*		
	Central County	MP	0.001	25.6	*		
N21A33	Central County	ES	0.003	8.7	*		
	Central County	LCA	0.034	91.0	*		
	Central County	MP	0.000	0.3	*		
N21A34	Central County	ES	0.015	94.4	*		
	Central County	LCA	0.001	5.6	*		
N21A35	Central County	ES	0.010	87.0	*		
	Central County	LCA	0.002	13.0	*		
N21A36	Central County	LCA	0.013	85.6	*		
	Central County	TE	0.002	14.4	*		
N21A37	Central County	PEA	0.008	60.0	*		
	Central County	LCA	0.005	40.0	*		
N21A38	Central County	MP	0.013	55.3	*		
	Central County	LCA	0.010	44.7	*		
N21A39	Central County	MP	0.003	32.7	*		
	Central County	LCA	0.006	56.7	*		
	Central County	PEA	0.001	10.6	*		
N21A4	Central County	LCA	0.004	44.2	*		
	Central County	MR	0.005	54.7	*		
	Central County	ES	0.000	1.2	*		
N21A40	Central County	LCA	0.022	43.6	*		
	Central County	MP	0.020	39.5	*		
	Central County	MR	0.006	12.0	*		
	Central County	PEA	0.003	4.9	*		

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N21A41	Central County	MR	0.017	61.7	*		
	Central County	VF	0.007	24.1	*		
	Central County	MP	0.004	14.2	*		
N21A42	Central County	LCA	0.008	38.8	*		
	Central County	MP	0.013	61.2	*		
N21A43	Central County	MP	0.004	100.0	*		
N21A44	Central County	MP	0.009	35.3	*		
	Central County	LCA	0.009	35.3	*		
	Central County	ES	0.007	29.3	*		
N21A5	Central County	MR	0.006	62.4	*		
	Central County	VF	0.004	37.6	*		
N21A6	Central County	ES	0.000	0.1	*		
	Central County	MR	0.236	98.2	*		
	Central County	VF	0.004	1.8	*		
N21A7	Central County	LCA	0.008	63.6	*		
	Central County	MR	0.002	15.2	*		
	Central County	ES	0.003	21.2	*		
N21A8	Central County	MR	0.008	95.3	*		
	Central County	VF	0.000	4.7	*		
N21A9	Central County	VF	0.006	23.3	*		
	Central County	MR	0.018	76.7	*		
N21A90	Central County	MR	0.002	18.0	*		
	Central County	VF	0.001	6.6	*		
	Central County	MP	0.003	23.0	*		
	Central County	LCA	0.003	20.5	*		
	Central County	ES	0.004	32.0	*		
N21A91	Central County	LCA	0.000	8.0	*		
	Central County	MR	0.004	70.0	*		
	Central County	MP	0.001	22.0	*		
N21A92	Central County	ES	0.000	1.7	*		
	Central County	LE	0.000	5.0	*		
	Central County	MP	0.003	50.0	*		
	Central County	MR	0.003	43.3	*		
N21AP1	Central County	LCA	0.005	29.2	*		
	Central County	MP	0.003	18.1	*		
	Central County	ES	0.008	49.1	*		
	Central County	PEA	0.001	3.5	*		
N21AP2	Central County	ES	0.005	30.4	*		
	Central County	LCA	0.005	35.1	*		
	Central County	PEA	0.005	34.5	*		
N21AP3	Central County	MP	0.002	16.0	*		
	Central County	LCA	0.008	79.8	*		
	Central County	PEA	0.000	2.1	*		
	Central County	TE	0.000	2.1	*		

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N21AP4	Central County	PEA	0.006	20.5	*		
	Central County	ES	0.003	9.2	*		
	Central County	LCA	0.018	59.9	*		
	Central County	MP	0.003	10.3	*		
N21AP5	Central County	LCA	0.003	29.4	*		
	Central County	MP	0.003	35.3	*		
	Central County	ES	0.003	35.3	*		
N21C	Central County	BS	0.011	2.9	0.39		
	Central County	CB	0.033	8.3	0.40		
	Central County	GE	0.036	9.3	0.26		
	Central County	LCA	0.019	4.7	0.25		
	Central County	LE	0.000	0.1	0.04		
	Central County	MR	0.212	53.9	0.05		
	Central County	TD	0.004	1.1	1.20		
	Central County	TG	0.017	4.2	0.04		
	Central County	TH	0.016	4.0	0.04		
	Central County	TW	0.014	3.6	0.05		
	Central County	VF	0.031	8.0	0.01		
N21D	Central County	GE	0.000	0.2	0.26		
	Central County	LCA	0.004	8.3	0.25		
	Central County	MR	0.033	62.1	0.05		
	Central County	TW	0.004	7.9	0.05		
	Central County	VF	0.011	21.5	0.01		
N21E	Central County	MR	0.026	41.6	0.05		
	Central County	VF	0.037	58.4	0.01		
N21F	Central County	GN	0.016	15.0	0.25		
	Central County	VF	0.088	85.0	0.01		
N21G	Central County	GE	0.001	1.0	0.26		
	Central County	GN	0.012	19.0	0.25		
	Central County	VF	0.051	80.0	0.01		
N21H	Central County	AA	0.002	6.3	0.26		
	Central County	GE	0.005	13.6	0.26		
	Central County	GN	0.025	75.5	0.25		
	Central County	VF	0.002	4.5	0.01		
N21I	Central County	GN	0.259	94.4	0.25		
	Central County	PWB	0.005	1.8	0.38		
	Central County	VF	0.011	3.9	0.01		
N21J	Central County	AGB	0.005	2.2	0.40		
	Central County	GN	0.092	39.7	0.25		
	Central County	GWD	0.102	44.1	0.35		
	Central County	PWB	0.001	0.3	0.38		
	Central County	RS	0.032	13.8	0.40	65.0	100
N21K	Central County	GN	0.012	5.1	0.25		
	Central County	GWD	0.149	65.0	0.35		
	Central County	PWB	0.055	23.8	0.38		
	Central County	RS	0.014	6.1	0.40	65.0	100

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* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N21Z	Central County	GN	0.086	78.8	0.25		
	Central County	VF	0.023	21.2	0.01		
N22	Central County	MR	0.325	68.5	0.05		
	Central County	TG	0.006	1.2	0.04		
	Central County	TH	0.014	2.9	0.04		
	Central County	TW	0.009	2.0	0.05		
	Central County	VF	0.121	25.5	0.01		
N22A	Central County	MR	0.101	56.4	0.05		
	Central County	TH	0.001	0.3	0.04		
	Central County	VF	0.077	43.3	0.01		
N22B	Central County	GN	0.095	51.3	0.25		
	Central County	MR	0.073	39.7	0.05		
	Central County	VF	0.017	9.0	0.01		
N23	Central County	AA	0.026	6.6	0.26		
	Central County	ABA	0.039	10.1	0.38		
	Central County	AFA	0.139	35.7	0.38		
	Central County	AGB	0.001	0.3	0.40		
	Central County	BS	0.009	2.2	0.39		
	Central County	BT	0.011	2.9	0.25		
	Central County	CB	0.042	10.7	0.40		
	Central County	GE	0.078	19.9	0.26		
	Central County	GGA	0.012	3.1	*		
	Central County	LCA	0.000	0.1	0.25		
	Central County	MR	0.009	2.4	0.05		
	Central County	TD	0.021	5.3	1.20		
	Central County	VF	0.002	0.6	0.01		
N23A	Central County	BT	0.000		0.25		
	Central County	CB	0.000	0.1	0.40		
	Central County	EBD	0.004	0.7	0.10		
	Central County	ES	0.028	5.7	0.25		
	Central County	GGA	0.064	13.1	0.25		
	Central County	GN	0.013	2.6	0.25		
	Central County	LB	0.001	0.2	0.40		
	Central County	LCA	0.323	66.6	0.25		
	Central County	MA	0.005	1.0	0.40		
	Central County	MP	0.005	1.1	0.25		
	Central County	MR	0.017	3.5	0.05		
	Central County	TU	0.022	4.5	0.25		
	Central County	VE	0.004	0.7	0.25		
N24	Central County	AGB	0.069	63.5	0.40		
	Central County	BS	0.002	1.9	0.39		
	Central County	CB	0.003	3.0	0.40		
	Central County	GGA	0.000	0.2	0.25		
	Central County	TD	0.034	31.4	1.20		
N24A	Central County	AGB	0.003	1.0	0.40		
	Central County	CB	0.000	0.1	0.40		
	Central County	CO	0.002	0.7	0.29	20.0	100
	Central County	EBD	0.004	1.8	0.10		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N24A	Central County	GE	0.005	1.9	0.26		
	Central County	GGA	0.034	14.3	0.25		
	Central County	GN	0.046	19.0	0.25		
	Central County	LB	0.006	2.5	0.40		
	Central County	LCA	0.131	54.5	0.25		
	Central County	PEA	0.000	0.1	0.37		
	Central County	PSB	0.004	1.5	0.26		
	Central County	VH	0.006	2.5	0.27		
N24B	Central County	GN	0.007	10.5	0.25		
	Central County	LCA	0.061	89.5	0.25		
N24C	Central County	AGB	0.012	6.6	0.40		
	Central County	CB	0.003	1.8	0.38*		
	Central County	GE	0.000	0.2	0.40*		
	Central County	GGA	0.071	38.2	0.39*		
	Central County	GN	0.000	0.2	0.40*		
	Central County	LCA	0.082	44.1	0.25		
	Central County	PEA	0.001	0.5	1.20*		
	Central County	PRB	0.015	8.1	0.28		
	Central County	VH	0.001	0.3	*		
N24D	Central County	AA	0.018	20.2	0.26		
	Central County	AFA	0.022	24.7	0.38		
	Central County	AGB	0.031	35.0	0.40		
	Central County	BS	0.013	14.7	0.39		
	Central County	CB	0.000	0.2	0.40		
	Central County	GN	0.005	5.1	0.25		
N24E	Central County	AGB	0.020	98.1	0.40		
	Central County	BS	0.000	1.9	0.39		
N24F	Central County	AGB	0.041	39.1	0.40		
	Central County	GN	0.055	52.5	0.25		
	Central County	VF	0.009	8.4	0.01		
N24G	Central County	AGB	0.289	65.6	0.40		
	Central County	GM	0.106	24.1	0.29		
	Central County	GN	0.042	9.6	0.25		
	Central County	GWD	0.001	0.3	0.35		
	Central County	PWB	0.002	0.4	0.38		
N24H	Central County	AGB	0.006	2.0	0.40		
	Central County	AL	0.037	12.9	0.40		
	Central County	GN	0.004	1.2	0.25		
	Central County	GWD	0.009	3.1	0.35		
	Central County	PWB	0.065	22.5	0.38		
	Central County	RS	0.153	53.6	0.40	65.0	100
	Central County	TSC	0.013	4.6	0.14		
N24I	Aguila/Carefree	115	0.006	1.9	0.39		
	Central County	AGB	0.126	41.9	0.40		
	Central County	AL	0.148	49.2	0.40		
	Central County	TSC	0.021	6.9	0.14		
N24J	Central County	AGB	0.121	100.0	0.40		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N24K	Aguila/Carefree	10	0.001	0.5	0.44*		
	Aguila/Carefree	3	0.006	2.9	0.58		
	Central County	AGB	0.124	58.2	0.40		
	Central County	GM	0.082	38.4	0.29		
N24L	Aguila/Carefree	112	0.002	0.4	0.39		
	Aguila/Carefree	115	0.004	0.9	0.39		
	Aguila/Carefree	18	0.011	2.8	0.33	15.0	100
	Central County	AL	0.007	1.9	0.40		
	Central County	CO	0.063	16.4	0.29	20.0	100
	Central County	GWD	0.088	23.0	0.35		
	Central County	RS	0.046	12.1	0.40	65.0	100
	Central County	TSC	0.162	42.5	0.14		
N24M	Aguila/Carefree	110	0.106	43.0	0.13		
	Aguila/Carefree	112	0.006	2.5	0.39		
	Aguila/Carefree	115	0.081	32.7	0.39		
	Aguila/Carefree	18	0.023	9.4	0.33	15.0	100
	Aguila/Carefree	21	0.003	1.3	0.38		
	Central County	AGB	0.007	2.6	0.40		
	Central County	TSC	0.021	8.5	0.14		
N24N	Aguila/Carefree	100	0.009	6.9	0.40	20.0	100
	Aguila/Carefree	110	0.000	0.1	0.13		
	Aguila/Carefree	115	0.002	1.5	0.39		
	Aguila/Carefree	18	0.042	31.9	0.33	15.0	100
	Aguila/Carefree	21	0.008	6.3	0.38		
	Aguila/Carefree	3	0.018	13.8	0.58		
	Aguila/Carefree	55	0.007	5.2	0.27		
	Aguila/Carefree	75	0.011	8.1	0.23		
	Central County	AGB	0.034	26.3	0.40		
N24O	Aguila/Carefree	110	0.055	35.4	0.13		
	Aguila/Carefree	112	0.035	22.9	0.39		
	Aguila/Carefree	18	0.056	35.9	0.33	15.0	100
	Central County	CO	0.001	0.6	0.29	20.0	100
	Central County	PT	0.008	5.3	0.40		
N24P	Aguila/Carefree	110	0.061	49.8	0.13		
	Aguila/Carefree	112	0.018	15.0	0.39		
	Aguila/Carefree	18	0.040	32.9	0.33	15.0	100
	Central County	TSC	0.003	2.3	0.14		
N24Q	Aguila/Carefree	100	0.007	19.0	0.40	20.0	100
	Aguila/Carefree	110	0.027	73.1	0.13		
	Aguila/Carefree	13	0.003	7.9	0.01		
N24R	Aguila/Carefree	100	0.004	10.6	0.40	20.0	100
	Aguila/Carefree	110	0.012	36.9	0.13		
	Aguila/Carefree	13	0.017	52.6	0.01		
N24S	Aguila/Carefree	100	0.008	17.4	0.40	20.0	100
	Aguila/Carefree	110	0.025	52.5	0.13		
	Aguila/Carefree	13	0.014	30.0	0.01		
N24T	Aguila/Carefree	110	0.015	84.5	0.13		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N24T	Aguila/Carefree	13	0.003	15.5	0.01		
N24U	Aguila/Carefree	100	0.037	32.8	0.40	20.0	100
	Aguila/Carefree	110	0.063	55.6	0.13		
	Aguila/Carefree	13	0.013	11.4	0.01		
	Aguila/Carefree	21	0.000	0.1	0.38		
N24V	Aguila/Carefree	100	0.028	60.7	0.40	20.0	100
	Aguila/Carefree	110	0.001	2.2	0.13		
	Aguila/Carefree	21	0.017	37.1	0.38		
N25	Central County	AGB	0.172	70.6	0.40		
	Central County	GM	0.008	3.2	0.29		
	Central County	TD	0.064	26.2	1.20		
N25A	Central County	AGB	0.001	1.2	0.40		
	Central County	GGA	0.058	60.7	0.25		
	Central County	LCA	0.003	2.9	0.25		
	Central County	PRB	0.033	35.2	0.28		
N25B	Central County	GGA	0.001	0.7	0.25		
	Central County	LCA	0.068	59.8	0.25		
	Central County	PRB	0.045	39.5	0.28		
N25C	Central County	GGA	0.010	5.7	0.25		
	Central County	LCA	0.136	81.2	0.25		
	Central County	PRB	0.022	13.1	0.28		
N25D	Central County	CO	0.013	6.5	0.29	20.0	100
	Central County	GXB	0.002	0.8	0.24		
	Central County	LCA	0.143	70.9	0.25		
	Central County	PEA	0.041	20.2	0.37		
	Central County	PRB	0.003	1.6	0.28		
N25E	Central County	AFA	0.016	5.8	0.38		
	Central County	CO	0.059	21.6	*	*	
	Central County	GXB	0.035	12.9	0.24		
	Central County	LCA	0.031	11.4	0.25		
	Central County	PEA	0.036	13.4	0.37		
	Central County	PRB	0.003	1.0	0.28		
	Central County	PT	0.080	29.4	0.40		
	Central County	RBA	0.013	4.6	0.26		
N25F	Central County	LCA	0.038	43.4	0.25		
	Central County	PEA	0.016	18.5	0.37		
	Central County	PRB	0.033	38.1	0.28		
N25G	Central County	GGA	0.022	36.1	0.25		
	Central County	LCA	0.007	12.0	0.25		
	Central County	PRB	0.032	51.9	0.28		
N25H	Central County	AGB	0.006	9.0	0.40		
	Central County	AL	0.013	19.3	0.40		
	Central County	GGA	0.041	60.6	0.25		
	Central County	PRB	0.002	3.2	0.28		
	Central County	TD	0.005	7.9	1.20		
N25I	Central County	AGB	0.019	16.0	0.40		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
	Central County	AL	0.073	61.6	0.40		
	Central County	GGA	0.017	14.7	0.25		
	Central County	LCA	0.005	3.9	0.25		
	Central County	TD	0.005	3.8	1.20		
N25J	Central County	AGB	0.013	13.0	0.40		
	Central County	AL	0.085	85.7	0.40		
	Central County	TD	0.001	1.3	1.20		
N25K	Central County	AL	0.017	18.5	0.40		
	Central County	CO	0.015	16.1	0.29	20.0	100
	Central County	LCA	0.048	52.8	0.25		
	Central County	PEA	0.000	0.2	0.37		
	Central County	PRB	0.011	12.4	0.28		
N25L	Central County	CO	0.009	14.6	0.29	20.0	100
	Central County	LCA	0.018	31.1	0.25		
	Central County	PEA	0.021	36.2	0.37		
	Central County	PRB	0.011	18.0	0.28		
N25M	Central County	CO	0.065	27.5	0.29	20.0	100
	Central County	GWD	0.054	23.0	0.35		
	Central County	GXB	0.007	3.0	0.24		
	Central County	PEA	0.001	0.4	0.37		
	Central County	PRB	0.024	10.1	0.28		
	Central County	PT	0.005	2.3	0.40		
	Central County	RBA	0.035	14.9	0.26		
	Central County	RS	0.045	18.9	0.40	65.0	100
N25N	Central County	GWD	0.021	84.6	0.35		
	Central County	PRB	0.004	15.4	0.28		
N25O	Central County	AGB	0.066	50.8	0.40		
	Central County	GWD	0.035	27.2	0.35		
	Central County	PT	0.020	15.2	0.40		
	Central County	RS	0.009	6.8	0.40	65.0	100
N25P	Central County	CO	0.003	1.7	0.29	20.0	100
	Central County	PT	0.016	9.4	0.40		
	Central County	RS	0.153	88.9	0.40	65.0	100
N25Q	Central County	RS	0.029	100.0	0.40	65.0	100
N25R	Central County	RS	0.093	100.0	0.40	65.0	100
N25S	Central County	RS	0.027	100.0	0.40	65.0	100
N26	Central County	AGB	0.019	47.5	0.40		
	Central County	AL	0.001	1.7	0.40		
	Central County	GM	0.014	35.8	0.29		
	Central County	TD	0.006	14.9	1.20		
N26A	Central County	AGB	0.094	26.5	0.40		
	Central County	AL	0.202	57.1	0.40		
	Central County	GWD	0.036	10.0	0.35		
	Central County	LCA	0.015	4.1	0.25		
	Central County	PEA	0.006	1.6	0.37		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N26A	Central County	TD	0.003	0.7	1.20		
N26B	Central County	AGB	0.132	58.6	0.40		
	Central County	AL	0.069	30.5	0.40		
	Central County	GN	0.017	7.6	0.25		
	Central County	GWD	0.007	3.3	0.35		
N27	Aguila/Carefree	10	0.048	17.0	0.94		
	Aguila/Carefree	100	0.006	2.3	0.40	20.0	100
	Aguila/Carefree	112	0.019	6.6	0.39		
	Aguila/Carefree	115	0.008	2.8	0.39		
	Aguila/Carefree	18	0.003	0.9	0.33	15.0	100
	Aguila/Carefree	3	0.051	17.9	0.58		
	Aguila/Carefree	55	0.002	0.7	0.27		
	Central County	AGB	0.059	20.9	0.40		
	Central County	AL	0.000		0.40		
	Central County	GM	0.025	8.9	0.29		
	Central County	TD	0.062	21.9	1.20		
N27A	Central County	AGB	0.007	6.3	0.40		
	Central County	AL	0.027	23.9	0.40		
	Central County	GN	0.079	69.8	0.25		
N27B	Aguila/Carefree	110	0.000	0.2	0.13		
	Aguila/Carefree	115	0.003	3.4	0.39		
	Central County	AGB	0.031	38.0	0.40		
	Central County	AL	0.048	58.4	0.40		
N27C	Aguila/Carefree	115	0.007	8.4	0.39		
	Central County	AGB	0.011	13.0	0.40		
	Central County	AL	0.067	77.5	0.40		
	Central County	TD	0.001	1.2	1.20		
N27D	Central County	AGB	0.083	93.7	0.40		
	Central County	AL	0.006	6.2	0.40		
	Central County	GN	0.000	0.1	0.25		
N27E	Aguila/Carefree	10	0.006	2.9	0.94		
	Aguila/Carefree	100	0.000	0.2	0.40	20.0	100
	Aguila/Carefree	112	0.092	49.0	0.39		
	Aguila/Carefree	115	0.059	31.5	0.39		
	Aguila/Carefree	3	0.019	10.1	0.58		
	Aguila/Carefree	98	0.007	3.8	0.37		
	Central County	AL	0.004	2.2	0.40		
	Central County	TD	0.001	0.3	1.20		
N27F	Aguila/Carefree	100	0.227	79.8	0.40	20.0	100
	Aguila/Carefree	112	0.009	3.3	0.39		
	Aguila/Carefree	115	0.018	6.2	0.39		
	Aguila/Carefree	98	0.030	10.7	0.37		
N27G	Aguila/Carefree	100	0.161	61.3	0.40	20.0	100
	Aguila/Carefree	112	0.001	0.4	0.39		
	Aguila/Carefree	115	0.058	22.2	0.39		
	Aguila/Carefree	98	0.042	16.2	0.37		
N27H	Aguila/Carefree	100	0.102	48.3	0.40	20.0	100

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
N27H	Aguila/Carefree	115	0.099	47.1	0.39		
	Aguila/Carefree	98	0.010	4.6	0.37		
N27I	Aguila/Carefree	100	0.072	43.6	0.40	20.0	100
	Aguila/Carefree	110	0.053	32.0	0.13		
	Aguila/Carefree	115	0.039	23.9	0.39		
	Central County	AGB	0.001	0.5	0.40		
N27J	Central County	AGB	0.040	21.1	0.40		
	Central County	PT	0.014	7.7	0.40		
	Aguila/Carefree	110	0.117	62.4	0.13		
	Aguila/Carefree	100	0.017	8.9	0.40	20.0	100
N27K	Aguila/Carefree	44	0.033	5.3	0.03		
	Central County	AGB	0.030	4.7	0.40		
	Aguila/Carefree	98	0.072	11.5	0.37		
	Aguila/Carefree	100	0.167	26.7	0.40	20.0	100
	Aguila/Carefree	110	0.324	51.7	0.13		
N27L	Aguila/Carefree	100	0.011	2.3	0.40	20.0	100
	Aguila/Carefree	101	0.034	7.3	0.28		
	Aguila/Carefree	110	0.128	27.4	0.13		
	Aguila/Carefree	18	0.119	25.5	0.33	15.0	100
	Aguila/Carefree	68	0.040	8.5	0.63		
	Aguila/Carefree	98	0.056	12.1	0.37		
	Central County	AGB	0.050	10.7	0.40		
	Central County	PT	0.002	0.4	0.40		
	Central County	RS	0.027	5.9	0.40	65.0	100
S01	Central County	LCA	0.219	85.6	0.25		
	Central County	MP	0.004	1.4	0.25		
	Central County	RBA	0.033	12.9	0.26		
	Central County	VH	0.000	0.1	0.27		
S01A	Central County	LCA	0.288	82.2	0.25		
	Central County	MP	0.012	3.5	0.25		
	Central County	PEA	0.020	5.7	0.37		
	Central County	RBA	0.030	8.6	0.26		
S01B	Central County	LCA	0.283	91.1	0.25		
	Central County	MP	0.007	2.3	0.25		
	Central County	MR	0.020	6.5	0.05		
	Central County	VF	0.001	0.2	0.01		
S01C	Central County	LCA	0.338	84.4	0.25		
	Central County	MR	0.011	2.7	0.05		
	Central County	PEA	0.007	1.8	0.37		
	Central County	VF	0.044	11.1	0.01		
S01D	Central County	LCA	0.543	86.3	0.25		
	Central County	MR	0.056	8.9	0.05		
	Central County	VF	0.030	4.8	0.01		
S01E	Central County	LCA	0.186	81.1	0.25		
	Central County	MR	0.043	18.9	0.05		
S01F	Central County	LCA	0.151	100.0	0.25		

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* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
S01G	Central County	LCA	0.116	41.2	0.25		
	Central County	MR	0.031	11.0	0.05		
	Central County	TW	0.135	47.8	0.05		
S01H	Central County	LCA	0.289	89.3	0.25		
	Central County	TW	0.035	10.7	0.05		
S01I	Central County	LCA	0.230	99.1	0.25		
	Central County	TW	0.002	0.9	0.05		
S10	Central County	CB	0.001	0.5	0.40		
	Central County	LCA	0.056	49.7	0.25		
	Central County	MR	0.054	48.6	0.05		
	Central County	TW	0.001	1.2	0.05		
S10A	Central County	CB	0.002	3.5	0.40		
	Central County	LCA	0.025	55.3	0.25		
	Central County	MR	0.019	41.2	0.05		
S10B	Central County	LCA	0.045	33.6	0.25		
	Central County	MR	0.043	32.1	0.05		
	Central County	PEA	0.021	15.9	0.37		
	Central County	VF	0.025	18.4	0.01		
S10C	Central County	LCA	0.176	47.0	0.25		
	Central County	TW	0.198	53.0	0.05		
S10D	Central County	LCA	0.409	89.4	0.25		
	Central County	MR	0.049	10.6	0.05		
S10E	Central County	LCA	0.369	58.5	0.25		
	Central County	MR	0.009	1.4	0.05		
	Central County	TU	0.019	2.9	0.25		
	Central County	TW	0.234	37.1	0.05		
S10F	Central County	LCA	0.248	74.1	0.25		
	Central County	MR	0.040	12.1	0.05		
	Central County	TW	0.046	13.8	0.05		
S10G	Central County	LCA	0.156	54.8	0.25		
	Central County	MR	0.049	17.1	0.05		
	Central County	PEA	0.041	14.3	0.37		
	Central County	VF	0.040	13.9	0.01		
S10I	Central County	LCA	0.112	85.3	0.25		
	Central County	MR	0.018	14.0	0.05		
	Central County	PEA	0.001	0.7	0.37		
S10J	Central County	LCA	0.050	64.7	0.25		
	Central County	MR	0.027	35.3	0.05		
S10K	Central County	LCA	0.206	61.1	0.25		
	Central County	MR	0.130	38.4	0.05		
	Central County	TH	0.002	0.5	0.04		
S10M	Central County	LCA	0.055	15.7	0.25		
	Central County	LE	0.002	0.6	0.04		
	Central County	TW	0.296	83.8	0.05		

* Custom Value (not default value)

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Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
S10N	Central County	LCA	0.130	95.7	0.25		
	Central County	MR	0.006	4.3	0.05		
S10O	Central County	GXA	0.002	0.2	0.23		
	Central County	LCA	0.556	70.2	0.25		
	Central County	MP	0.008	1.0	0.25		
	Central County	MR	0.114	14.3	0.05		
	Central County	PEA	0.017	2.1	0.37		
	Central County	TG	0.011	1.4	0.04		
	Central County	TH	0.069	8.7	0.04		
	Central County	TW	0.015	1.9	0.05		
	Central County	VF	0.002	0.2	0.01		
S10P	Central County	LCA	0.311	94.4	0.25		
	Central County	LE	0.004	1.3	0.04		
	Central County	TW	0.014	4.3	0.05		
S10Q	Central County	LCA	0.177	69.5	0.25		
	Central County	MR	0.019	7.5	0.05		
	Central County	RBA	0.006	2.5	0.26		
	Central County	TH	0.004	1.4	0.04		
	Central County	TW	0.009	3.7	0.05		
	Central County	VF	0.040	15.5	0.01		
S10R	Central County	GXA	0.005	16.1	0.23		
	Central County	LCA	0.023	68.4	0.25		
	Central County	PEA	0.005	14.6	0.37		
	Central County	TG	0.000	0.9	0.04		
S10S	Central County	LCA	0.172	35.4	0.25		
	Central County	LE	0.014	2.8	0.04		
	Central County	MR	0.064	13.2	0.05		
	Central County	PEA	0.005	0.9	0.37		
	Central County	RBA	0.056	11.6	0.26		
	Central County	TG	0.042	8.7	0.04		
	Central County	TH	0.015	3.0	0.04		
	Central County	VF	0.119	24.4	0.01		
S10T	Central County	GXA	0.010	2.8	0.23		
	Central County	LCA	0.201	59.2	0.25		
	Central County	MP	0.008	2.4	0.25		
	Central County	MR	0.005	1.6	0.05		
	Central County	PEA	0.077	22.6	0.37		
	Central County	RBA	0.001	0.2	0.26		
	Central County	TW	0.002	0.5	0.05		
	Central County	VF	0.037	10.8	0.01		
S10U	Central County	LCA	0.070	65.4	0.25		
	Central County	PEA	0.023	21.5	0.37		
	Central County	PT	0.005	4.7	0.40		
	Central County	TG	0.009	8.4	0.04		
S10V	Central County	GXA	0.028	14.0	0.23		
	Central County	LCA	0.087	43.9	0.25		
	Central County	MP	0.007	3.7	0.25		

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* XKSAT value is zero.

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
S10V	Central County	MR	0.019	9.6	0.05		
	Central County	PEA	0.026	13.0	0.37		
	Central County	PT	0.030	15.2	0.40		
	Central County	TG	0.001	0.6	0.04		
S20	Central County	LCA	0.002	1.1	0.25		
	Central County	LE	0.004	2.8	0.04		
	Central County	TW	0.131	96.1	0.05		
S20A	Central County	TW	0.161	100.0	0.05		
S30	Central County	ABA	0.011	3.5	0.38		
	Central County	CA2	0.065	20.4	0.38		
	Central County	GXA	0.050	15.7	0.23		
	Central County	LCA	0.141	44.0	0.25		
	Central County	PEA	0.039	12.3	0.37		
	Central County	RBA	0.011	3.4	0.26		
	Central County	TE	0.001	0.4	0.25		
	Central County	VA	0.001	0.4	0.39		
S30A	Central County	LB	0.001	0.1	0.40		
	Central County	LCA	0.338	63.6	0.25		
	Central County	LE	0.088	16.6	0.04		
	Central County	MR	0.102	19.2	0.05		
	Central County	VF	0.002	0.4	0.01		
S30B	Central County	GXA	0.027	6.9	0.23		
	Central County	LCA	0.194	48.7	0.25		
	Central County	MP	0.000	0.1	0.25		
	Central County	MR	0.070	17.6	0.05		
	Central County	PEA	0.003	0.8	0.37		
	Central County	PSA	0.003	0.8	0.25		
	Central County	RBA	0.071	17.9	0.26		
	Central County	TFA	0.000	0.1	0.37		
	Central County	TRA	0.007	1.7	0.11		
	Central County	TRB	0.000	0.1	0.13		
	Central County	VF	0.022	5.5	0.01		
S30C	Central County	GXA	0.002	0.4	0.23		
	Central County	LB	0.013	2.8	0.40		
	Central County	LCA	0.199	43.7	0.25		
	Central County	LE	0.000		0.04		
	Central County	MP	0.006	1.2	0.25		
	Central County	MR	0.163	35.9	0.05		
	Central County	PEA	0.003	0.7	0.37		
	Central County	VF	0.069	15.2	0.01		
S30D	Central County	LCA	0.007	5.0	0.25		
	Central County	MP	0.045	34.2	0.25		
	Central County	MR	0.054	41.6	0.05		
	Central County	TRA	0.019	14.2	0.11		
	Central County	TRB	0.007	5.0	0.13		

* Custom Value (not default value)

* XKSAT value is zero.

LAND USE INFORMATION

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
398A	Mountain	0.102	100.0	Dry	25.0		0.15	0.070	Hi	0.105
398B	MHDR	0.092	68.0	Normal	50.0	40	0.25	0.050	Low	0.056
	WATER	0.043	32.0	Wet		100		0.001	Min	0.031
398C	MHDR	0.064	68.3	Normal	50.0	40	0.25	0.050	Low	0.058
	WATER	0.030	31.7	Wet		100		0.001	Min	0.032
398D	Mountain	0.837	100.0	Dry	25.0		0.15	0.070	Hi	0.082
398E	Desert	0.028	25.3	Dry	25.0		0.35	0.030	Low	0.063
	Mountain	0.084	74.7	Dry	25.0		0.15	0.070	Hi	0.107
398F	MHDR	0.143	70.1	Normal	50.0	40	0.25	0.050	Low	0.053
	WATER	0.061	29.9	Wet		100		0.001	Min	0.030
398G	MHDR	0.157	71.0	Normal	50.0	40	0.25	0.050	Low	0.052
	WATER	0.064	29.0	Wet		100		0.001	Min	0.030
A01	VACANT	0.202	100.0	Dry	15.0	5	0.10	0.030	Min	0.027
A01A	VACANT	0.051	100.0	Dry	15.0	5	0.10	0.030	Min	0.031
A01B	Ins-3	0.004	2.5	Normal	60.0	60	0.10	0.020	Min	0.038
	VACANT	0.145	97.5	Dry	15.0	5	0.10	0.030	Min	0.028
A01C	Ind	0.001	0.3	Normal	60.0	55	0.15	0.030	Min	0.042
	Ins-3	0.220	99.7	Normal	60.0	60	0.10	0.020	Min	0.027
A01D	Ind	0.043	20.4	Normal	60.0	55	0.15	0.030	Min	0.031
	Ins-3	0.031	14.7	Normal	60.0	60	0.10	0.020	Min	0.032
	VACANT	0.137	64.9	Dry	15.0	5	0.10	0.030	Min	0.028
A01E	Ind	0.059	71.7	Normal	60.0	55	0.15	0.030	Min	0.030
	VACANT	0.024	28.3	Dry	15.0	5	0.10	0.030	Min	0.033
A01F	Agr	0.007	2.3	Wet	85.0		0.50	0.100	Hi	0.135
	MHDR	0.110	39.0	Normal	50.0	40	0.25	0.050	Low	0.055
	Ins-3	0.003	1.0	Normal	60.0	60	0.10	0.020	Min	0.038
	VACANT	0.162	57.7	Dry	15.0	5	0.10	0.030	Min	0.027
A01G	Ins-3	0.053	28.5	Normal	60.0	60	0.10	0.020	Min	0.030
	VACANT	0.132	71.5	Dry	15.0	5	0.10	0.030	Min	0.028

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
A01H	Ins-3	0.000	0.1	Normal	60.0	60	0.10	0.020	Min	0.047
	VACANT	0.069	99.9	Dry	15.0	5	0.10	0.030	Min	0.030
A02	Desert	0.000	1.8	Dry	25.0		0.35	0.030	Low	0.090
	VACANT	0.017	98.2	Dry	15.0	5	0.10	0.030	Min	0.034
A02A	Agr	0.329	54.4	Wet	85.0		0.50	0.100	Hi	0.092
	Desert	0.026	4.3	Dry	25.0		0.35	0.030	Low	0.063
	OPEN	0.024	3.9	Dry	10.0		0.10	0.020	Min	0.033
	MHDR	0.021	3.4	Normal	50.0	40	0.25	0.050	Low	0.065
	MFR	0.002	0.3	Normal	50.0	45	0.25	0.050	Low	0.079
	VACANT	0.201	33.2	Dry	15.0	5	0.10	0.030	Min	0.027
	VACANT-1	0.002	0.4	Dry		10	0.10	0.300	Min	0.039
A02B	Agr	0.001	0.2	Wet	85.0		0.50	0.100	Hi	0.160
	Desert	0.087	32.0	Dry	25.0		0.35	0.030	Low	0.056
	MHDR	0.160	59.1	Normal	50.0	40	0.25	0.050	Low	0.052
	VACANT	0.003	1.2	Dry	15.0	5	0.10	0.030	Min	0.038
	VACANT-1	0.020	7.5	Dry		10	0.10	0.300	Min	0.033
A02C	Agr	0.006	1.7	Wet	85.0		0.50	0.100	Hi	0.136
	Desert	0.001	0.3	Dry	25.0		0.35	0.030	Low	0.083
	OPEN	0.082	24.7	Dry	10.0		0.10	0.020	Min	0.029
	MHDR	0.126	37.7	Normal	50.0	40	0.25	0.050	Low	0.054
	MFR	0.038	11.3	Normal	50.0	45	0.25	0.050	Low	0.061
	Ins-3	0.008	2.3	Normal	60.0	60	0.10	0.020	Min	0.036
	Com-1	0.005	1.4	Normal	70.0	70	0.10	0.020	Min	0.037
	VACANT	0.069	20.7	Dry	15.0	5	0.10	0.030	Min	0.030
A02D	Agr	0.003	4.8	Wet	85.0		0.50	0.100	Hi	0.143
	Desert	0.060	95.2	Dry	25.0		0.35	0.030	Low	0.058
A03	Desert	0.245	88.6	Dry	25.0		0.35	0.030	Low	0.050
	OPEN	0.031	11.4	Dry	10.0		0.10	0.020	Min	0.032
A03A	Desert	0.131	92.9	Dry	25.0		0.35	0.030	Low	0.054
	Ins-3	0.010	7.1	Normal	60.0	60	0.10	0.020	Min	0.035
A03B	Desert	0.054	74.0	Dry	25.0		0.35	0.030	Low	0.059
	MDR	0.018	25.3	Normal	50.0	30	0.25	0.050	Low	0.065

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	VACANT	0.001	0.7	Dry	15.0	5	0.10	0.030	Min	0.043
A03C	Desert	0.038	11.6	Dry	25.0		0.35	0.030	Low	0.061
	Open-2	0.039	12.0	Normal	95.0	2	0.20	0.020	Min	0.031
	MDR	0.247	75.7	Normal	50.0	30	0.25	0.050	Low	0.050
	MHDR	0.002	0.6	Normal	50.0	40	0.25	0.050	Low	0.079
A03D	Desert	0.128	100.0	Dry	25.0		0.35	0.030	Low	0.054
A03E	Desert	0.016	10.2	Dry	25.0		0.35	0.030	Low	0.066
	MDR	0.060	39.1	Normal	50.0	30	0.25	0.050	Low	0.058
	MHDR	0.032	20.5	Normal	50.0	40	0.25	0.050	Low	0.062
	MFR	0.002	1.3	Normal	50.0	45	0.25	0.050	Low	0.079
	Ins-3	0.005	2.9	Normal	60.0	60	0.10	0.020	Min	0.037
	Com-2	0.008	5.2	Normal	75.0	80	0.10	0.020	Min	0.036
	VACANT	0.032	20.8	Dry	15.0	5	0.10	0.030	Min	0.032
A04	Desert	0.056	71.5	Dry	25.0		0.35	0.030	Low	0.059
	MHDR	0.001	1.8	Normal	50.0	40	0.25	0.050	Low	0.081
	VACANT	0.021	26.7	Dry	15.0	5	0.10	0.030	Min	0.033
A04A	MHDR	0.207	93.2	Normal	50.0	40	0.25	0.050	Low	0.051
	Ins-3	0.003	1.2	Normal	60.0	60	0.10	0.020	Min	0.039
	Com-2	0.006	2.7	Normal	75.0	80	0.10	0.020	Min	0.036
	VACANT	0.006	2.9	Dry	15.0	5	0.10	0.030	Min	0.036
A05	Desert	0.068	52.3	Dry	25.0		0.35	0.030	Low	0.057
	MHDR	0.062	47.7	Normal	50.0	40	0.25	0.050	Low	0.058
A05A	Open-2	0.036	24.9	Normal	95.0	2	0.20	0.020	Min	0.031
	MHDR	0.108	75.1	Normal	50.0	40	0.25	0.050	Low	0.055
A06	Desert	0.278	100.0	Dry	25.0		0.35	0.030	Low	0.049
A06A	Desert	0.047	17.0	Dry	25.0		0.35	0.030	Low	0.060
	OPEN	0.000		Dry	10.0		0.10	0.020	Min	0.047
	Open-2	0.031	11.1	Normal	95.0	2	0.20	0.020	Min	0.032
	MDR	0.018	6.4	Normal	50.0	30	0.25	0.050	Low	0.065
	MHDR	0.072	25.7	Normal	50.0	40	0.25	0.050	Low	0.057
	MFR	0.013	4.5	Normal	50.0	45	0.25	0.050	Low	0.068
	Com-1	0.004	1.4	Normal	70.0	70	0.10	0.020	Min	0.038

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	Com-2	0.000	0.1	Normal	75.0	80	0.10	0.020	Min	0.044
	VACANT-1	0.094	33.8	Dry		10	0.10	0.300	Min	0.029
A07	Desert	0.092	78.5	Dry	25.0		0.35	0.030	Low	0.056
	MDR	0.025	21.5	Normal	50.0	30	0.25	0.050	Low	0.063
A07A	Desert	0.017	13.6	Dry	25.0		0.35	0.030	Low	0.066
	OPEN	0.041	33.4	Dry	10.0		0.10	0.020	Min	0.031
	MDR	0.065	52.4	Normal	50.0	30	0.25	0.050	Low	0.058
	VACANT-1	0.001	0.6	Dry		10	0.10	0.300	Min	0.042
A07B	Agr	0.001	0.1	Wet	85.0		0.50	0.100	Hi	0.160
	Desert	0.004	0.6	Dry	25.0		0.35	0.030	Low	0.075
	OPEN	0.034	5.2	Dry	10.0		0.10	0.020	Min	0.032
	Open-2	0.049	7.6	Normal	95.0	2	0.20	0.020	Min	0.031
	MDR	0.004	0.7	Normal	50.0	30	0.25	0.050	Low	0.074
	MHDR	0.195	30.0	Normal	50.0	40	0.25	0.050	Low	0.051
	Ind	0.007	1.1	Normal	60.0	55	0.15	0.030	Min	0.036
	VACANT-1	0.356	54.8	Dry		10	0.10	0.300	Min	0.025
A07C	Agr	0.010	5.6	Wet	85.0		0.50	0.100	Hi	0.130
	Desert	0.162	92.3	Dry	25.0		0.35	0.030	Low	0.052
	OPEN	0.001	0.3	Dry	10.0		0.10	0.020	Min	0.043
	MHR	0.001	0.8	Normal	50.0	60	0.25	0.050	Low	0.081
	VACANT	0.000	0.1	Dry	15.0	5	0.10	0.030	Min	0.047
	VACANT-1	0.002	0.9	Dry		10	0.10	0.300	Min	0.040
A07D	Agr	0.214	93.7	Wet	85.0		0.50	0.100	Hi	0.097
	Desert	0.008	3.6	Dry	25.0		0.35	0.030	Low	0.070
	MDR	0.006	2.7	Normal	50.0	30	0.25	0.050	Low	0.072
A07E	OPEN	0.014	6.3	Dry	10.0		0.10	0.020	Min	0.034
	MDR	0.079	34.6	Normal	50.0	30	0.25	0.050	Low	0.057
	MHDR	0.008	3.4	Normal	50.0	40	0.25	0.050	Low	0.070
	MHR	0.109	48.1	Normal	50.0	60	0.25	0.050	Low	0.055
	Com-2	0.017	7.5	Normal	75.0	80	0.10	0.020	Min	0.034
A07F	Open-2	0.054	23.3	Normal	95.0	2	0.20	0.020	Min	0.030
	MDR	0.005	2.2	Normal	50.0	30	0.25	0.050	Low	0.073

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
A07F	MHDR	0.161	69.2	Normal	50.0	40	0.25	0.050	Low	0.052
	Com-2	0.012	5.3	Normal	75.0	80	0.10	0.020	Min	0.034
A07G	MDR	0.063	24.5	Normal	50.0	30	0.25	0.050	Low	0.058
	MHDR	0.008	3.3	Normal	50.0	40	0.25	0.050	Low	0.070
	MFR	0.004	1.4	Normal	50.0	45	0.25	0.050	Low	0.075
	MHR	0.001	0.3	Normal	50.0	60	0.25	0.050	Low	0.085
	Ind	0.003	1.0	Normal	60.0	55	0.15	0.030	Min	0.039
	Ins-3	0.001	0.3	Normal	60.0	60	0.10	0.020	Min	0.042
	VACANT	0.041	15.9	Dry	15.0	5	0.10	0.030	Min	0.031
	VACANT-1	0.122	47.4	Dry		10	0.10	0.300	Min	0.028
	Water	0.015	5.9	Wet		100	0.05*	0.020 *	Min	0.034
A07H	Agr	0.020	21.7	Wet	85.0		0.50	0.100	Hi	0.122
	Desert	0.036	38.5	Dry	25.0		0.35	0.030	Low	0.061
	Ins-3	0.037	39.7	Normal	60.0	60	0.10	0.020	Min	0.031
	VACANT	0.000	0.1	Dry	15.0	5	0.10	0.030	Min	0.047
A08	Desert	0.040	52.3	Dry	25.0		0.35	0.030	Low	0.061
	MDR	0.037	47.7	Normal	50.0	30	0.25	0.050	Low	0.061
A08A	Desert	0.004	2.7	Dry	25.0		0.35	0.030	Low	0.075
	OPEN	0.051	37.2	Dry	10.0		0.10	0.020	Min	0.031
	MDR	0.083	60.1	Normal	50.0	30	0.25	0.050	Low	0.056
A08B	Agr	0.002	1.9	Wet	85.0		0.50	0.100	Hi	0.148
	Desert	0.024	24.4	Dry	25.0		0.35	0.030	Low	0.064
	OPEN	0.019	19.4	Dry	10.0		0.10	0.020	Min	0.033
	MDR	0.054	54.3	Normal	50.0	30	0.25	0.050	Low	0.059
A09	Desert	0.135	77.1	Dry	25.0		0.35	0.030	Low	0.053
	OPEN	0.020	11.6	Dry	10.0		0.10	0.020	Min	0.033
	LDR	0.001	0.6	Normal	50.0	15	0.30	0.050	Low	0.082
	MDR	0.019	10.6	Normal	50.0	30	0.25	0.050	Low	0.065
A09A	Agr	0.038	45.6	Wet	85.0		0.50	0.100	Hi	0.115
	Desert	0.015	17.9	Dry	25.0		0.35	0.030	Low	0.066
	LDR	0.003	3.3	Normal	50.0	15	0.30	0.050	Low	0.077
	MDR	0.000	0.1	Normal	50.0	30	0.25	0.050	Low	0.096
	Ins-3	0.001	1.7	Normal	60.0	60	0.10	0.020	Min	0.040

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	Com-1	0.026	31.3	Normal	70.0	70	0.10	0.020	Min	0.032
A09B	Agr	0.001	1.9	Wet	85.0		0.50	0.100	Hi	0.157
	Desert	0.002	4.3	Dry	25.0		0.35	0.030	Low	0.079
	Ins-3	0.039	93.7	Normal	60.0	60	0.10	0.020	Min	0.031
A09C	Agr	0.005	6.4	Wet	85.0		0.50	0.100	Hi	0.138
	Desert	0.064	87.8	Dry	25.0		0.35	0.030	Low	0.058
	Ins-3	0.004	5.8	Normal	60.0	60	0.10	0.020	Min	0.037
A09D	Desert	0.006	2.5	Dry	25.0		0.35	0.030	Low	0.072
	OPEN	0.007	2.8	Dry	10.0		0.10	0.020	Min	0.036
	MDR	0.207	81.5	Normal	50.0	30	0.25	0.050	Low	0.051
	MHDR	0.000	0.1	Normal	50.0	40	0.25	0.050	Low	0.090
	MFR	0.003	1.0	Normal	50.0	45	0.25	0.050	Low	0.077
	WATER	0.014	5.6	Wet		100		0.001	Min	0.034
	Ins-3	0.000	0.2	Normal	60.0	60	0.10	0.020	Min	0.044
	VACANT	0.016	6.4	Dry	15.0	5	0.10	0.030	Min	0.034
A09E	OPEN	0.003	2.1	Dry	10.0		0.10	0.020	Min	0.038
	MDR	0.088	59.5	Normal	50.0	30	0.25	0.050	Low	0.056
	MHDR	0.009	5.8	Normal	50.0	40	0.25	0.050	Low	0.070
	WATER	0.009	6.2	Wet		100		0.001	Min	0.035
	Com-2	0.007	4.6	Normal	75.0	80	0.10	0.020	Min	0.036
	VACANT	0.009	6.0	Dry	15.0	5	0.10	0.030	Min	0.035
	VACANT-1	0.023	15.9	Dry		10	0.10	0.300	Min	0.033
A09F	Desert	0.002	0.6	Dry	25.0		0.35	0.030	Low	0.078
	OPEN	0.075	20.5	Dry	10.0		0.10	0.020	Min	0.029
	MDR	0.176	48.1	Normal	50.0	30	0.25	0.050	Low	0.052
	MHDR	0.008	2.3	Normal	50.0	40	0.25	0.050	Low	0.070
	MFR	0.032	8.6	Normal	50.0	45	0.25	0.050	Low	0.062
	VACANT-1	0.073	19.9	Dry		10	0.10	0.300	Min	0.030
A09G	Desert	0.221	100.0	Dry	25.0		0.35	0.030	Low	0.050
A09H	Desert	0.238	97.0	Dry	25.0		0.35	0.030	Low	0.050
	LDR	0.000	0.1	Normal	50.0	15	0.30	0.050	Low	0.092
	VACANT-1	0.007	2.9	Dry		10	0.10	0.300	Min	0.036

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
A09I	Desert	0.021	12.3	Dry	25.0		0.35	0.030	Low	0.065
	OPEN	0.005	2.9	Dry	10.0		0.10	0.020	Min	0.037
	LDR	0.006	3.4	Normal	50.0	15	0.30	0.050	Low	0.072
	MDR	0.121	72.3	Normal	50.0	30	0.25	0.050	Low	0.054
	VACANT-1	0.015	9.0	Dry		10	0.10	0.300	Min	0.034
A09J	Desert	0.162	96.4	Dry	25.0		0.35	0.030	Low	0.052
	MDR	0.001	0.3	Normal	50.0	30	0.25	0.050	Low	0.087
	VACANT-1	0.006	3.3	Dry		10	0.10	0.300	Min	0.037
A09K	Desert	0.410	99.6	Dry	25.0		0.35	0.030	Low	0.047
	VLDR	0.001	0.3	Normal	30.0	5	0.30	0.050	Low	0.081
	VACANT-1	0.001	0.1	Dry		10	0.10	0.300	Min	0.043
A09L	Desert	0.008	5.6	Dry	25.0		0.35	0.030	Low	0.071
	OPEN	0.024	17.7	Dry	10.0		0.10	0.020	Min	0.033
	MDR	0.098	71.8	Normal	50.0	30	0.25	0.050	Low	0.055
	VACANT-1	0.007	4.9	Dry		10	0.10	0.300	Min	0.036
A09M	Desert	0.102	41.1	Dry	25.0		0.35	0.030	Low	0.055
	VLDR	0.005	2.0	Normal	30.0	5	0.30	0.050	Low	0.073
	LDR	0.000	0.2	Normal	50.0	15	0.30	0.050	Low	0.088
	VACANT-1	0.140	56.7	Dry		10	0.10	0.300	Min	0.028
A09N	Desert	0.018	16.4	Dry	25.0		0.35	0.030	Low	0.065
	LDR	0.020	18.2	Normal	50.0	15	0.30	0.050	Low	0.065
	VACANT-1	0.072	65.3	Dry		10	0.10	0.300	Min	0.030
A09O	Desert	0.154	79.4	Dry	25.0		0.35	0.030	Low	0.053
	VLDR	0.040	20.6	Normal	30.0	5	0.30	0.050	Low	0.061
A09P	Desert	0.170	96.2	Dry	25.0		0.35	0.030	Low	0.052
	VLDR	0.007	3.8	Normal	30.0	5	0.30	0.050	Low	0.071
A09Q	Desert	0.116	52.9	Dry	25.0		0.35	0.030	Low	0.054
	VLDR	0.103	47.1	Normal	30.0	5	0.30	0.050	Low	0.055
A09R	Desert	0.144	100.0	Dry	25.0		0.35	0.030	Low	0.053
A09S	Desert	0.069	100.0	Dry	25.0		0.35	0.030	Low	0.057
A09T	Desert	0.147	80.9	Dry	25.0		0.35	0.030	Low	0.053

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	VLDR	0.035	19.1	Normal	30.0	5	0.30	0.050	Low	0.062
A09U	Desert	0.161	92.1	Dry	25.0		0.35	0.030	Low	0.052
	VLDR	0.014	7.9	Normal	30.0	5	0.30	0.050	Low	0.067
A10	Desert	0.206	96.3	Dry	25.0		0.35	0.030	Low	0.051
	LDR	0.001	0.3	Normal	50.0	15	0.30	0.050	Low	0.085
	Ind	0.002	0.7	Normal	60.0	55	0.15	0.030	Min	0.040
	VACANT-1	0.006	2.6	Dry		10	0.10	0.300	Min	0.037
A10A	Desert	0.131	69.4	Dry	25.0		0.35	0.030	Low	0.054
	VLDR	0.058	30.6	Normal	30.0	5	0.30	0.050	Low	0.058
A11	Desert	0.162	100.0	Dry	25.0		0.35	0.030	Low	0.052
A11A	Desert	0.555	93.4	Dry	25.0		0.35	0.030	Low	0.045
	VLDR	0.040	6.6	Normal	30.0	5	0.30	0.050	Low	0.061
A11B	Desert	0.121	82.4	Dry	25.0		0.35	0.030	Low	0.054
	VLDR	0.026	17.6	Normal	30.0	5	0.30	0.050	Low	0.063
A11C	Desert	0.121	100.0	Dry	25.0		0.35	0.030	Low	0.054
A11D	Desert	0.113	77.7	Dry	25.0		0.35	0.030	Low	0.054
	VLDR	0.033	22.3	Normal	30.0	5	0.30	0.050	Low	0.062
A11E	Desert	0.268	89.6	Dry	25.0		0.35	0.030	Low	0.049
	VLDR	0.031	10.4	Normal	30.0	5	0.30	0.050	Low	0.062
A11F	Desert	0.436	93.7	Dry	25.0		0.35	0.030	Low	0.046
	VLDR	0.029	6.3	Normal	30.0	5	0.30	0.050	Low	0.062
A11G	Desert	0.028	41.8	Dry	25.0		0.35	0.030	Low	0.063
	VLDR	0.039	58.2	Normal	30.0	5	0.30	0.050	Low	0.061
A11H	Desert	0.070	97.6	Dry	25.0		0.35	0.030	Low	0.057
	VLDR	0.002	2.4	Normal	30.0	5	0.30	0.050	Low	0.079
A11I	Desert	0.269	96.5	Dry	25.0		0.35	0.030	Low	0.049
	VLDR	0.010	3.5	Normal	30.0	5	0.30	0.050	Low	0.069
A11J	Desert	0.072	94.1	Dry	25.0		0.35	0.030	Low	0.057
	VLDR	0.005	5.9	Normal	30.0	5	0.30	0.050	Low	0.074

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
A11K	Desert	0.286	96.1	Dry	25.0		0.35	0.030	Low	0.049
	VLDR	0.012	3.9	Normal	30.0	5	0.30	0.050	Low	0.068
A11L	Desert	0.245	98.0	Dry	25.0		0.35	0.030	Low	0.050
	VLDR	0.005	2.0	Normal	30.0	5	0.30	0.050	Low	0.073
A11M	Desert	0.257	100.0	Dry	25.0		0.35	0.030	Low	0.050
A11N	Desert	0.082	100.0	Dry	25.0		0.35	0.030	Low	0.056
A11O	Desert	0.057	100.0	Dry	25.0		0.35	0.030	Low	0.059
A21A	Mountain	53.120	100.0	Dry	25.0		0.15	0.070	Hi	0.037
A21AA	OPEN	0.450	6.5	Dry	10.0		0.10	0.020	Min	0.025
	MHDR	6.470	93.5	Normal	50.0	40	0.25	0.050	Low	0.030
A21AB	OPEN	1.780	7.7	Dry	10.0		0.10	0.020	Min	0.021
	Comm	21.230	92.3	Normal	75.0	80	0.10	0.020	Min	0.014
A21AC	OPEN	1.390	9.7	Dry	10.0		0.10	0.020	Min	0.022
	Comm	12.880	90.3	Normal	75.0	80	0.10	0.020	Min	0.016
A21AD	OPEN	3.270	9.7	Dry	10.0		0.10	0.020	Min	0.019
	MHDR	30.370	90.3	Normal	50.0	40	0.25	0.050	Low	0.021
A21AE	OPEN	4.520	15.0	Dry	10.0		0.10	0.020	Min	0.018
	MHDR	25.690	85.0	Normal	50.0	40	0.25	0.050	Low	0.022
A21AF	OPEN	0.180	6.6	Dry	10.0		0.10	0.020	Min	0.027
	MHDR	2.560	93.4	Normal	50.0	40	0.25	0.050	Low	0.036
A21AG	OPEN	2.685	13.6	Dry	10.0		0.10	0.020	Min	0.020
	MHDR	17.035	86.4	Normal	50.0	40	0.25	0.050	Low	0.024
A21AH	OPEN	1.650	10.3	Dry	10.0		0.10	0.020	Min	0.021
	MHDR	14.420	89.7	Normal	50.0	40	0.25	0.050	Low	0.025
A21AI	OPEN	0.350	7.5	Dry	10.0		0.10	0.020	Min	0.025
	MHDR	4.300	92.5	Normal	50.0	40	0.25	0.050	Low	0.033
A21AJ	OPEN	0.390	5.5	Dry	10.0		0.10	0.020	Min	0.025
	MFR	6.750	94.5	Normal	50.0	45	0.25	0.050	Low	0.030

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
A21AK	OPEN	2.440	8.8	Dry	10.0		0.10	0.020	Min	0.020
	Comm	25.170	91.2	Normal	75.0	80	0.10	0.020	Min	0.014
A21B	Mountain	0.022	100.0	Dry	25.0		0.15	0.070	Hi	0.121
A21C	OPEN-2	8.620	25.1	Normal	95.0	2	0.20	0.020	Min	0.017
	MHDR	23.130	67.5	Normal	50.0	40	0.25	0.050	Low	0.023
	WATER	2.530	7.4	Wet		100		0.001	Min	0.020
A21D	Mountain	11.940	100.0	Dry	25.0		0.15	0.070	Hi	0.053
A21E	OPEN-2	3.460	9.3	Normal	95.0	2	0.20	0.020	Min	0.019
	MHDR	30.910	83.5	Normal	50.0	40	0.25	0.050	Low	0.021
	WATER	2.650	7.2	Wet		100		0.001	Min	0.020
A21F	Mountain	29.430	100.0	Dry	25.0		0.15	0.070	Hi	0.043
A21G	OPEN-2	8.820	33.3	Normal	95.0	2	0.20	0.020	Min	0.017
	MHDR	16.800	63.5	Normal	50.0	40	0.25	0.050	Low	0.025
	WATER	0.840	3.2	Wet		100		0.001	Min	0.023
A21H	MHDR	3.590	75.7	Normal	50.0	40	0.25	0.050	Low	0.034
	WATER	1.150	24.3	Wet		100		0.001	Min	0.022
A21I	Mountain	23.840	100.0	Dry	25.0		0.15	0.070	Hi	0.045
A21J	OPEN-2	8.900	12.4	Normal	95.0	2	0.20	0.020	Min	0.017
	MHDR	62.240	86.6	Normal	50.0	40	0.25	0.050	Low	0.017
	WATER	0.770	1.1	Wet		100		0.001	Min	0.023
A21K	OPEN-2	8.550	19.8	Normal	95.0	2	0.20	0.020	Min	0.017
	MHDR	31.680	73.2	Normal	50.0	40	0.25	0.050	Low	0.021
	WATER	3.030	7.0	Wet		100		0.001	Min	0.019
A21L	OPEN	0.530	3.0	Dry	10.0		0.10	0.020	Min	0.024
	OPEN-2	1.360	7.6	Normal	95.0	2	0.20	0.020	Min	0.022
	MHDR	15.230	84.9	Normal	50.0	40	0.25	0.050	Low	0.025
	WATER	0.820	4.6	Wet		100		0.001	Min	0.023
A21M	MHDR	9.750	93.0	Normal	50.0	40	0.25	0.050	Low	0.028
	WATER	0.730	7.0	Wet		100		0.001	Min	0.023
A21N	OPEN-2	37.850	22.9	Normal	95.0	2	0.20	0.020	Min	0.013

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	MHDR	108.880	65.9	Normal	50.0	40	0.25	0.050	Low	0.013
	Ins-1	12.620	7.6	Normal	85.0	75	0.10	0.020	Min	0.016
	WATER	5.940	3.6	Wet		100		0.001	Min	0.018
A21O	Com-1	5.425	78.4	Normal	70.0	70	0.10	0.020	Min	0.018
	WATER	1.495	21.6	Wet		100		0.001	Min	0.021
A21P	MHDR	20.180	89.8	Normal	50.0	40	0.25	0.050	Low	0.023
	WATER	2.300	10.2	Wet		100		0.001	Min	0.020
A21Q	OPEN	0.140	0.5	Dry	10.0		0.10	0.020	Min	0.028
	MHDR	26.600	96.7	Normal	50.0	40	0.25	0.050	Low	0.022
	WATER	0.760	2.8	Wet		100		0.001	Min	0.023
A21R	MHDR	4.500	87.0	Normal	50.0	40	0.25	0.050	Low	0.032
	WATER	0.670	13.0	Wet		100		0.001	Min	0.024
A21S	MHDR	8.815	93.1	Normal	50.0	40	0.25	0.050	Low	0.028
	WATER	0.655	6.9	Wet		100		0.001	Min	0.024
A21T	OPEN	0.170	0.7	Dry	10.0		0.10	0.020	Min	0.027
	MHDR	20.710	85.5	Normal	50.0	40	0.25	0.050	Low	0.023
	WATER	3.350	13.8	Wet		100		0.001	Min	0.019
A21U	OPEN	1.090	1.2	Dry	10.0		0.10	0.020	Min	0.022
	OPEN-2	22.530	24.3	Normal	95.0	2	0.20	0.020	Min	0.014
	MHDR	62.670	67.6	Normal	50.0	40	0.25	0.050	Low	0.017
	WATER	6.370	6.9	Wet		100		0.001	Min	0.017
A21V	OPEN-2	22.720	95.1	Normal	95.0	2	0.20	0.020	Min	0.014
	WATER	1.170	4.9	Wet		100		0.001	Min	0.022
A21W	OPEN-2	11.250	100.0	Normal	95.0	2	0.20	0.020	Min	0.016
A21X	OPEN-2	15.450	100.0	Normal	95.0	2	0.20	0.020	Min	0.015
A21Y	OPEN	2.077	6.5	Dry	10.0		0.10	0.020	Min	0.020
	MHDR	26.126	81.2	Normal	50.0	40	0.25	0.050	Low	0.022
	Park	3.987	12.4	Normal	90.0		0.20	0.100	Hi	0.065
A21Z	OPEN	8.230	19.9	Dry	10.0		0.10	0.020	Min	0.017
	MHDR	33.160	80.1	Normal	50.0	40	0.25	0.050	Low	0.021

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
A99	VACANT	0.135	100.0	Dry	15.0	5	0.10	0.030	Min	0.028
A99A	VACANT	0.085	66.9	Dry	15.0	5	0.10	0.030	Min	0.029
	Water	0.042	33.1	Wet		100	0.05*	0.200 *	Min	0.031
A99B	VACANT	0.051	100.0	Dry	15.0	5	0.10	0.030	Min	0.031
A99C	VACANT	0.028	100.0	Dry	15.0	5	0.10	0.030	Min	0.032
A99D	VACANT	0.030	100.0	Dry	15.0	5	0.10	0.030	Min	0.032
A99E	VACANT	0.024	100.0	Dry	15.0	5	0.10	0.030	Min	0.033
A99F	Desert	0.112	100.0	Dry	25.0		0.35	0.030	Low	0.054
A99G	Desert	0.022	100.0	Dry	25.0		0.35	0.030	Low	0.064
A99H	Agr	0.003	3.2	Wet	85.0		0.50	0.100	Hi	0.142
	Desert	0.098	96.8	Dry	25.0		0.35	0.030	Low	0.055
A99I	OPEN	0.002	1.7	Dry	10.0		0.10	0.020	Min	0.039
	MHDR	0.127	88.3	Normal	50.0	40	0.25	0.050	Low	0.054
	Ins-3	0.004	2.4	Normal	60.0	60	0.10	0.020	Min	0.038
	VACANT	0.011	7.6	Dry	15.0	5	0.10	0.030	Min	0.035
A99J	MDR	0.001	1.0	Normal	50.0	30	0.25	0.050	Low	0.081
	MHDR	0.084	61.5	Normal	50.0	40	0.25	0.050	Low	0.056
	Com-2	0.040	29.1	Normal	75.0	80	0.10	0.020	Min	0.031
	VACANT	0.007	5.4	Dry	15.0	5	0.10	0.030	Min	0.036
	Water	0.004	2.9	Wet		100	0.05*	0.200 *	Min	0.037
A99K	MDR	0.040	38.2	Normal	50.0	30	0.25	0.050	Low	0.061
	MHDR	0.008	7.3	Normal	50.0	40	0.25	0.050	Low	0.070
	Com-2	0.026	24.2	Normal	75.0	80	0.10	0.020	Min	0.032
	Com-4	0.015	13.8	Normal	75.0	85	0.10	0.020	Min	0.034
	VACANT	0.018	16.5	Dry	15.0	5	0.10	0.030	Min	0.033
A99L	Desert	0.006	7.7	Dry	25.0		0.35	0.030	Low	0.072
	MDR	0.046	59.3	Normal	50.0	30	0.25	0.050	Low	0.060
	Com-2	0.026	33.0	Normal	75.0	80	0.10	0.020	Min	0.032
A99M	Desert	0.010	16.3	Dry	25.0		0.35	0.030	Low	0.069

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
A99M	MDR	0.001	2.0	Normal	50.0	30	0.25	0.050	Low	0.082
	FWY	0.004	6.2	Normal	80.0	95	0.05	0.020	Low	0.075
	Com-2	0.045	75.5	Normal	75.0	80	0.10	0.020	Min	0.031
A99N	Desert	0.011	7.0	Dry	25.0		0.35	0.030	Low	0.068
	Open-2	0.009	5.7	Normal	95.0	2	0.20	0.020	Min	0.035
	MHDR	0.024	15.0	Normal	50.0	40	0.25	0.050	Low	0.064
	MFR	0.073	45.2	Normal	50.0	45	0.25	0.050	Low	0.057
	FWY	0.008	4.7	Normal	80.0	95	0.05	0.020	Low	0.071
	Ins-3	0.029	17.9	Normal	60.0	60	0.10	0.020	Min	0.032
	Com-1	0.007	4.5	Normal	70.0	70	0.10	0.020	Min	0.036
A99O	Desert	0.038	37.6	Dry	25.0		0.35	0.030	Low	0.061
	MHDR	0.027	26.4	Normal	50.0	40	0.25	0.050	Low	0.063
	MFR	0.037	36.0	Normal	50.0	45	0.25	0.050	Low	0.061
A99P	Desert	0.102	17.7	Dry	25.0		0.35	0.030	Low	0.055
	Open-2	0.057	9.9	Normal	95.0	2	0.20	0.020	Min	0.030
	MDR	0.036	6.3	Normal	50.0	30	0.25	0.050	Low	0.061
	MHDR	0.248	43.1	Normal	50.0	40	0.25	0.050	Low	0.050
	MFR	0.079	13.7	Normal	50.0	45	0.25	0.050	Low	0.057
	Com-2	0.008	1.3	Normal	75.0	80	0.10	0.020	Min	0.036
	VACANT	0.046	8.0	Dry	15.0	5	0.10	0.030	Min	0.031
A99Q	Desert	0.118	100.0	Dry	25.0		0.35	0.030	Low	0.054
A99R	Desert	0.022	58.3	Dry	25.0		0.35	0.030	Low	0.064
	OPEN	0.001	2.2	Dry	10.0		0.10	0.020	Min	0.042
	MDR	0.015	39.6	Normal	50.0	30	0.25	0.050	Low	0.067
A99S	Desert	0.077	100.0	Dry	25.0		0.35	0.030	Low	0.057
A99T	Desert	0.024	81.2	Dry	25.0		0.35	0.030	Low	0.064
	LDR	0.006	18.8	Normal	50.0	15	0.30	0.050	Low	0.072
A99U	Desert	0.070	100.0	Dry	25.0		0.35	0.030	Low	0.057
A99V	Desert	0.203	98.2	Dry	25.0		0.35	0.030	Low	0.051
	OPEN	0.000	0.2	Dry	10.0		0.10	0.020	Min	0.044
	MDR	0.003	1.6	Normal	50.0	30	0.25	0.050	Low	0.076

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
A99W	Desert	0.102	47.4	Dry	25.0		0.35	0.030	Low	0.055
	OPEN	0.011	5.2	Dry	10.0		0.10	0.020	Min	0.035
	MDR	0.099	45.7	Normal	50.0	30	0.25	0.050	Low	0.055
	Ind	0.003	1.5	Normal	60.0	55	0.15	0.030	Min	0.038
	VACANT-1	0.000		Dry		10	0.10	0.300	Min	0.047
A99X	Desert	0.078	29.6	Dry	25.0		0.35	0.030	Low	0.057
	Ind	0.186	70.4	Normal	60.0	55	0.15	0.030	Min	0.027
A99Y	Desert	0.312	98.0	Dry	25.0		0.35	0.030	Low	0.048
	VLDR	0.006	2.0	Normal	30.0	5	0.30	0.050	Low	0.072
A99Z	Agr	0.155	100.0	Wet	85.0		0.50	0.100	Hi	0.100
N01	OPEN	0.069	10.6	Dry	10.0		0.10	0.020	Min	0.030
	Ind	0.385	59.5	Normal	60.0	55	0.15	0.030	Min	0.025
	VACANT	0.194	29.9	Dry	15.0	5	0.10	0.030	Min	0.027
N01A	Ind	0.001	0.1	Normal	60.0	55	0.15	0.030	Min	0.043
	Ins-3	0.001	0.2	Normal	60.0	60	0.10	0.020	Min	0.041
	VACANT	0.411	99.6	Dry	15.0	5	0.10	0.030	Min	0.025
N02	Agr	0.116	15.3	Wet	85.0		0.50	0.100	Hi	0.103
	OPEN	0.395	52.1	Dry	10.0		0.10	0.020	Min	0.025
	LDR	0.001	0.1	Normal	50.0	15	0.30	0.050	Low	0.085
	Ind	0.040	5.3	Normal	60.0	55	0.15	0.030	Min	0.031
	VACANT	0.120	15.8	Dry	15.0	5	0.10	0.030	Min	0.028
	Water	0.087	11.4	Wet		100	0.05*	0.020 *	Min	0.029
N02A	Agr	0.001	0.3	Wet	85.0		0.50	0.100	Hi	0.162
	OPEN	0.036	20.1	Dry	10.0		0.10	0.020	Min	0.031
	Ind	0.035	19.3	Normal	60.0	55	0.15	0.030	Min	0.032
	VACANT	0.107	60.0	Dry	15.0	5	0.10	0.030	Min	0.029
	Water	0.000	0.2	Wet		100	0.05*	0.020 *	Min	0.044
N02B	Agr	0.103	67.6	Wet	85.0		0.50	0.100	Hi	0.105
	Ind	0.049	32.4	Normal	60.0	55	0.15	0.030	Min	0.031
N03	Agr	0.142	23.4	Wet	85.0		0.50	0.100	Hi	0.101
	OPEN	0.003	0.4	Dry	10.0		0.10	0.020	Min	0.039
	LDR	0.070	11.6	Normal	50.0	15	0.30	0.050	Low	0.057

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	MDR	0.123	20.4	Normal	50.0	30	0.25	0.050	Low	0.054
	MHDR	0.004	0.6	Normal	50.0	40	0.25	0.050	Low	0.075
	MFR	0.012	2.1	Normal	50.0	45	0.25	0.050	Low	0.068
	Com-1	0.003	0.5	Normal	70.0	70	0.10	0.020	Min	0.038
	VACANT	0.160	26.5	Dry	15.0	5	0.10	0.030	Min	0.027
	Water	0.088	14.5	Wet		100	0.05*	0.020 *	Min	0.029
N03A	Agr	0.017	4.5	Wet	85.0		0.50	0.100	Hi	0.124
	OPEN	0.064	16.3	Dry	10.0		0.10	0.020	Min	0.030
	MHDR	0.301	77.3	Normal	50.0	40	0.25	0.050	Low	0.049
	MFR	0.002	0.6	Normal	50.0	45	0.25	0.050	Low	0.078
	VACANT	0.005	1.3	Dry	15.0	5	0.10	0.030	Min	0.037
N03B	Agr	0.388	61.8	Wet	85.0		0.50	0.100	Hi	0.090
	OPEN	0.048	7.7	Dry	10.0		0.10	0.020	Min	0.031
	LDR	0.117	18.7	Normal	50.0	15	0.30	0.050	Low	0.054
	MDR	0.043	6.8	Normal	50.0	30	0.25	0.050	Low	0.060
	Ins-1	0.032	5.1	Normal	85.0	75	0.10	0.020	Min	0.032
N04	Agr	0.001	0.2	Wet	85.0		0.50	0.100	Hi	0.152
	OPEN	0.008	0.9	Dry	10.0		0.10	0.020	Min	0.036
	LDR	0.001	0.1	Normal	50.0	15	0.30	0.050	Low	0.083
	MDR	0.188	22.7	Normal	50.0	30	0.25	0.050	Low	0.051
	MHDR	0.279	33.7	Normal	50.0	40	0.25	0.050	Low	0.049
	MFR	0.036	4.4	Normal	50.0	45	0.25	0.050	Low	0.061
	FWY	0.025	3.1	Normal	80.0	95	0.05	0.020	Low	0.063
	Ins-3	0.007	0.9	Normal	60.0	60	0.10	0.020	Min	0.036
	Com-2	0.014	1.7	Normal	75.0	80	0.10	0.020	Min	0.034
	VACANT	0.181	21.9	Dry	15.0	5	0.10	0.030	Min	0.027
	Water	0.086	10.4	Wet		100	0.05*	0.020 *	Min	0.029
N04A	MHDR	0.042	63.2	Normal	50.0	40	0.25	0.050	Low	0.060
	Com-2	0.025	36.6	Normal	75.0	80	0.10	0.020	Min	0.033
	Water	0.000	0.1	Wet		100	0.05*	0.020 *	Min	0.047
N05	Agr	0.050	18.1	Wet	85.0		0.50	0.100	Hi	0.112
	Desert	0.001	0.3	Dry	25.0		0.35	0.030	Low	0.084
	OPEN	0.006	2.0	Dry	10.0		0.10	0.020	Min	0.037
	Open-2	0.005	1.7	Normal	95.0	2	0.20	0.020	Min	0.037

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	MDR	0.001	0.3	Normal	50.0	30	0.25	0.050	Low	0.084
	MHDR	0.002	0.6	Normal	50.0	40	0.25	0.050	Low	0.079
	FWY	0.027	9.6	Normal	80.0	95	0.05	0.020	Low	0.063
	Com-2	0.048	17.3	Normal	75.0	80	0.10	0.020	Min	0.031
	VACANT	0.047	16.9	Dry	15.0	5	0.10	0.030	Min	0.031
	Water	0.092	33.2	Wet		100	0.05*	0.020 *	Min	0.029
N05A	Open-2	0.000	0.2	Normal	95.0	2	0.20	0.020	Min	0.044
	MDR	0.050	28.8	Normal	50.0	30	0.25	0.050	Low	0.059
	MHDR	0.050	28.8	Normal	50.0	40	0.25	0.050	Low	0.059
	MFR	0.019	10.7	Normal	50.0	45	0.25	0.050	Low	0.065
	Com-2	0.034	19.8	Normal	75.0	80	0.10	0.020	Min	0.032
	Com-4	0.004	2.4	Normal	75.0	85	0.10	0.020	Min	0.037
	VACANT	0.016	9.2	Dry	15.0	5	0.10	0.030	Min	0.034
	Water	0.000	0.2	Wet		100	0.05*	0.020 *	Min	0.044
N05B	Open-2	0.042	13.3	Normal	95.0	2	0.20	0.020	Min	0.031
	MHDR	0.250	79.7	Normal	50.0	40	0.25	0.050	Low	0.050
	MFR	0.000		Normal	50.0	45	0.25	0.050	Low	0.096
	FWY	0.001	0.2	Normal	80.0	95	0.05	0.020	Low	0.085
	Ins-3	0.002	0.7	Normal	60.0	60	0.10	0.020	Min	0.039
	Com-2	0.019	6.1	Normal	75.0	80	0.10	0.020	Min	0.033
	Com-4	0.000		Normal	75.0	85	0.10	0.020	Min	0.047
N05C	OPEN	0.000	0.1	Dry	10.0		0.10	0.020	Min	0.046
	Open-2	0.082	29.7	Normal	95.0	2	0.20	0.020	Min	0.029
	MHDR	0.195	70.1	Normal	50.0	40	0.25	0.050	Low	0.051
	Com-2	0.000	0.1	Normal	75.0	80	0.10	0.020	Min	0.044
N06	Agr	0.070	11.8	Wet	85.0		0.50	0.100	Hi	0.109
	Desert	0.050	8.5	Dry	25.0		0.35	0.030	Low	0.059
	MDR	0.001	0.2	Normal	50.0	30	0.25	0.050	Low	0.081
	MFR	0.049	8.2	Normal	50.0	45	0.25	0.050	Low	0.059
	FWY	0.013	2.2	Normal	80.0	95	0.05	0.020	Low	0.067
	Ins-3	0.023	3.9	Normal	60.0	60	0.10	0.020	Min	0.033
	Com-2	0.008	1.4	Normal	75.0	80	0.10	0.020	Min	0.035
	Com-4	0.048	8.0	Normal	75.0	85	0.10	0.020	Min	0.031
	VACANT	0.207	34.8	Dry	15.0	5	0.10	0.030	Min	0.027

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
N06	Water	0.125	21.1	Wet		100	0.05*	0.020 *	Min	0.028
N07	Agr	0.091	12.1	Wet	85.0		0.50	0.100	Hi	0.106
	Open-2	0.053	7.1	Normal	95.0	2	0.20	0.020	Min	0.030
	MDR	0.148	19.7	Normal	50.0	30	0.25	0.050	Low	0.053
	MHDR	0.226	30.1	Normal	50.0	40	0.25	0.050	Low	0.050
	MFR	0.026	3.4	Normal	50.0	45	0.25	0.050	Low	0.063
	FWY	0.009	1.2	Normal	80.0	95	0.05	0.020	Low	0.070
	Com-1	0.002	0.2	Normal	70.0	70	0.10	0.020	Min	0.040
	Com-2	0.025	3.3	Normal	75.0	80	0.10	0.020	Min	0.032
	VACANT	0.103	13.7	Dry	15.0	5	0.10	0.030	Min	0.029
	Water	0.068	9.0	Wet		100	0.05*	0.200 *	Min	0.030
N07A	MDR	0.181	51.0	Normal	50.0	30	0.25	0.050	Low	0.052
	MHDR	0.136	38.3	Normal	50.0	40	0.25	0.050	Low	0.053
	MFR	0.016	4.6	Normal	50.0	45	0.25	0.050	Low	0.066
	VACANT	0.006	1.6	Dry	15.0	5	0.10	0.030	Min	0.037
	Water	0.017	4.6	Wet		100	0.05*	0.200 *	Min	0.034
N08	Agr	0.000		Wet	85.0		0.50	0.100	Hi	0.180
	OPEN	0.164	20.9	Dry	10.0		0.10	0.020	Min	0.027
	LDR	0.002	0.2	Normal	50.0	15	0.30	0.050	Low	0.079
	MFR	0.032	4.0	Normal	50.0	45	0.25	0.050	Low	0.062
	FWY	0.042	5.3	Normal	80.0	95	0.05	0.020	Low	0.060
	Comm	0.033	4.2	Normal	75.0	80	0.10	0.020	Min	0.032
	Com-1	0.007	0.9	Normal	70.0	70	0.10	0.020	Min	0.036
	Com-2	0.241	30.7	Normal	75.0	80	0.10	0.020	Min	0.026
	VACANT	0.186	23.6	Dry	15.0	5	0.10	0.030	Min	0.027
	WATER	0.081	10.2	Wet		100	0.05*	0.020 *	Min	0.029
N08A	Agr	0.078	10.6	Wet	85.0		0.50	0.100	Hi	0.108
	MDR	0.239	32.5	Normal	50.0	30	0.25	0.050	Low	0.050
	MFR	0.136	18.5	Normal	50.0	45	0.25	0.050	Low	0.053
	Com-1	0.017	2.3	Normal	70.0	70	0.10	0.020	Min	0.034
	Com-2	0.000		Normal	75.0	80	0.10	0.020	Min	0.047
	Com-3	0.243	33.0	Normal	80.0	95	0.05	0.020	Min	0.026
	VACANT	0.023	3.1	Dry	15.0	5	0.10	0.030	Min	0.033
N08B	OPEN	0.003	0.5	Dry	10.0		0.10	0.020	Min	0.038

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	Open-2	0.105	15.0	Normal	95.0	2	0.20	0.020	Min	0.029
	MDR	0.002	0.3	Normal	50.0	30	0.25	0.050	Low	0.077
	MHDR	0.493	70.4	Normal	50.0	40	0.25	0.050	Low	0.046
	MFR	0.042	6.0	Normal	50.0	45	0.25	0.050	Low	0.060
	FWY	0.000	0.1	Normal	80.0	95	0.05	0.020	Low	0.088
	Com-2	0.009	1.3	Normal	75.0	80	0.10	0.020	Min	0.035
	VACANT	0.018	2.6	Dry	15.0	5	0.10	0.030	Min	0.033
	WATER	0.027	3.8	Wet		100		0.001	Min	0.032
N09	OPEN	0.055	8.5	Dry	10.0		0.10	0.020	Min	0.030
	MHDR	0.341	52.5	Normal	50.0	40	0.25	0.050	Low	0.048
	FWY	0.012	1.9	Normal	80.0	95	0.05	0.020	Low	0.068
	Comm	0.013	1.9	Normal	75.0	80	0.10	0.020	Min	0.034
	Com-2	0.076	11.7	Normal	75.0	80	0.10	0.020	Min	0.029
	VACANT-1	0.011	1.6	Dry		10	0.10	0.300	Min	0.035
	Water	0.142	21.9	Wet		100	0.05*	0.020 *	Min	0.028
N10	OPEN	0.002	0.3	Dry	10.0		0.10	0.020	Min	0.040
	Open-2	0.030	6.1	Normal	95.0	2	0.20	0.020	Min	0.032
	MHDR	0.323	65.7	Normal	50.0	40	0.25	0.050	Low	0.048
	Ind	0.009	1.8	Normal	60.0	55	0.15	0.030	Min	0.035
	Comm	0.001	0.2	Normal	75.0	80	0.10	0.020	Min	0.041
	Com-1	0.000		Normal	70.0	70	0.10	0.020	Min	0.046
	Com-2	0.050	10.1	Normal	75.0	80	0.10	0.020	Min	0.031
	VACANT	0.077	15.6	Dry	15.0	5	0.10	0.030	Min	0.029
N11	MHDR	0.333	38.3	Normal	50.0	40	0.25	0.050	Low	0.048
	MFR	0.122	14.0	Normal	50.0	45	0.25	0.050	Low	0.054
	Ind	0.010	1.2	Normal	60.0	55	0.15	0.030	Min	0.035
	Ins-1	0.000		Normal	85.0	75	0.10	0.020	Min	0.047
	Ins-3	0.007	0.8	Normal	60.0	60	0.10	0.020	Min	0.036
	Com-1	0.004	0.4	Normal	70.0	70	0.10	0.020	Min	0.038
	Com-2	0.114	13.1	Normal	75.0	80	0.10	0.020	Min	0.028
	VACANT	0.279	32.1	Dry	15.0	5	0.10	0.030	Min	0.026
	WATER	0.000		Wet		100		0.001	Min	0.046
N11C	Desert	0.001	0.4	Dry	25.0		0.35	0.030	Low	0.083
	OPEN	0.049	19.2	Dry	10.0		0.10	0.020	Min	0.031

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
N11C	MDR	0.204	80.0	Normal	50.0	30	0.25	0.050	Low	0.051
	MHDR	0.000	0.2	Normal	50.0	40	0.25	0.050	Low	0.088
	VACANT-1	0.001	0.3	Dry		10	0.10	0.300	Min	0.042
N11D	Desert	0.000		Dry	25.0		0.35	0.030	Low	0.092
	MDR	0.110	21.5	Normal	50.0	30	0.25	0.050	Low	0.055
	VACANT-1	0.401	78.5	Dry		10	0.10	0.300	Min	0.025
N11E	OPEN	0.004	0.8	Dry	10.0		0.10	0.020	Min	0.038
	MDR	0.486	99.2	Normal	50.0	30	0.25	0.050	Low	0.046
N11F	Desert	0.244	100.0	Dry	25.0		0.35	0.030	Low	0.050
N11G	Desert	0.523	100.0	Dry	25.0		0.35	0.030	Low	0.045
N11H	Desert	0.438	100.0	Dry	25.0		0.35	0.030	Low	0.046
N11I	Desert	0.000		Dry	25.0		0.35	0.030	Low	0.096
	VLDR	0.106	17.1	Normal	30.0	5	0.30	0.050	Low	0.055
	LDR	0.000		Normal	50.0	15	0.30	0.050	Low	0.090
	MDR	0.474	76.9	Normal	50.0	30	0.25	0.050	Low	0.046
	Com-1	0.000		Normal	70.0	70	0.10	0.020	Min	0.047
	VACANT	0.037	5.9	Dry	15.0	5	0.10	0.030	Min	0.031
N11J	Desert	0.002	0.8	Dry	25.0		0.35	0.030	Low	0.079
	VLDR	0.123	50.4	Normal	30.0	5	0.30	0.050	Low	0.054
	LDR	0.115	47.1	Normal	50.0	15	0.30	0.050	Low	0.054
	OPEN	0.004	1.6	*	10.0		0.10	0.020	Min	0.037
N11K	Desert	0.072	38.7	Dry	25.0		0.35	0.030	Low	0.057
	OPEN	0.006	3.2	Dry	10.0		0.10	0.020	Min	0.036
	VLDR	0.040	21.5	Normal	30.0	5	0.30	0.050	Low	0.061
	MDR	0.067	36.0	Normal	50.0	30	0.25	0.050	Low	0.058
	Com-1	0.001	0.6	Normal	70.0	70	0.10	0.020	Min	0.041
N11L	Desert	0.052	17.7	Dry	25.0		*	*	Low	0.059
	LDR	0.095	32.4	Normal	50.0	*	*	*	Low	0.055
	VLDR	0.133	45.4	Dry *	30.0	*	*	*	Low	0.053
	Com-1	0.005	1.7	Normal	70.0	70	0.10	0.020	Min	0.037
	Ind	0.008	2.7	Normal	60.0	55	0.15	0.030	Min	0.036

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
N11M	Desert	0.099	99.7	Dry	25.0		0.35	0.030	Low	0.055
	LDR	0.000	0.3	Normal	50.0	15	0.30	0.050	Low	0.090
N11N	Desert	0.154	58.3	Dry	25.0		0.35	0.030	Low	0.053
	VLDR	0.088	33.3	Normal	30.0	5	0.30	0.050	Low	0.056
	LDR	0.022	8.5	Normal	50.0	15	0.30	0.050	Low	0.064
N11O	Desert	0.054	100.0	Dry	25.0		0.35	0.030	Low	0.059
N11P	Desert	0.358	94.0	Dry	25.0		*	*	Low	0.048
	LDR	0.010	2.6	Normal	50.0	15	0.30	0.050	Low	0.069
	VLDR	0.013	3.4	Normal	30.0	5	0.30	0.050	Low	0.067
N12	OPEN	0.144	28.3	Dry	10.0		0.10	0.020	Min	0.028
	MHDR	0.252	49.5	Normal	50.0	40	0.25	0.050	Low	0.050
	FWY	0.009	1.7	Normal	80.0	95	0.05	0.020	Low	0.070
	Ins-1	0.023	4.6	Normal	85.0	75	0.10	0.020	Min	0.033
	Com-2	0.003	0.5	Normal	75.0	80	0.10	0.020	Min	0.039
	WATER	0.078	15.4	Wet		100		0.001	Min	0.029
N13	Agr	0.042	8.4	Wet	85.0		0.50	0.100	Hi	0.114
	OPEN	0.024	4.8	Dry	10.0		0.10	0.020	Min	0.033
	MHDR	0.043	8.7	Normal	50.0	40	0.25	0.050	Low	0.060
	MFR	0.010	2.0	Normal	50.0	45	0.25	0.050	Low	0.069
	FWY	0.322	64.7	Normal	80.0	95	0.05	0.020	Low	0.048
	Comm	0.002	0.4	Normal	75.0	80	0.10	0.020	Min	0.039
	Com-1	0.003	0.7	Normal	70.0	70	0.10	0.020	Min	0.038
	Com-2	0.017	3.5	Normal	75.0	80	0.10	0.020	Min	0.033
	Com-3	0.000	0.1	Normal	80.0	95	0.05	0.020	Min	0.044
	VACANT	0.025	5.1	Dry	15.0	5	0.10	0.030	Min	0.032
	WATER	0.008	1.6	Wet		100		0.001	Min	0.036
N14	Com-2	0.046	60.2	Normal	75.0	80	0.10	0.020	Min	0.031
	WATER	0.030	39.8	Wet		100		0.001	Min	0.032
N14A	OPEN	0.005	1.0	Dry	10.0		0.10	0.020	Min	0.037
	MDR	0.353	79.5	Normal	50.0	30	0.25	0.050	Low	0.048
	Com-2	0.058	13.0	Normal	75.0	80	0.10	0.020	Min	0.030
	VACANT	0.029	6.4	Dry	15.0	5	0.10	0.030	Min	0.032

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
N15	MDR	0.389	72.4	Normal	50.0	30	0.25	0.050	Low	0.047
	FWY	0.004	0.8	Normal	80.0	95	0.05	0.020	Low	0.074
	Com-1	0.004	0.8	Normal	70.0	70	0.10	0.020	Min	0.037
	Com-2	0.019	3.6	Normal	75.0	80	0.10	0.020	Min	0.033
	VACANT	0.084	15.7	Dry	15.0	5	0.10	0.030	Min	0.029
	WATER	0.037	6.8	Wet		100		0.001	Min	0.031
N15A	OPEN	0.049	6.1	Dry	10.0		0.10	0.020	Min	0.031
	Open-2	0.131	16.5	Normal	95.0	2	0.20	0.020	Min	0.028
	MDR	0.547	68.8	Normal	50.0	30	0.25	0.050	Low	0.045
	Ins-1	0.025	3.2	Normal	85.0	75	0.10	0.020	Min	0.032
	Com-2	0.033	4.2	Normal	75.0	80	0.10	0.020	Min	0.032
	WATER	0.010	1.3	Wet		100		0.001	Min	0.035
N15B	Agr	0.122	16.4	Wet	85.0		0.50	0.100	Hi	0.103
	OPEN	0.019	2.6	Dry	10.0		0.10	0.020	Min	0.033
	MDR	0.385	51.6	Normal	50.0	30	0.25	0.050	Low	0.047
	FWY	0.014	1.8	Normal	80.0	95	0.05	0.020	Low	0.067
	Ins-2	0.041	5.5	Normal	85.0	70	0.10	0.020	Min	0.031
	Comm	0.010	1.3	Normal	75.0	80	0.10	0.020	Min	0.035
	Com-2	0.020	2.7	Normal	75.0	80	0.10	0.020	Min	0.033
	VACANT	0.132	17.7	Dry	15.0	5	0.10	0.030	Min	0.028
	WATER	0.003	0.4	Wet		100		0.001	Min	0.038
N16	Agr	0.031	3.4	Wet	85.0		0.50	0.100	Hi	0.118
	OPEN	0.011	1.2	Dry	10.0		0.10	0.020	Min	0.035
	LDR	0.122	13.2	Normal	50.0	15	0.30	0.050	Low	0.054
	MDR	0.553	59.9	Normal	50.0	30	0.25	0.050	Low	0.045
	Ins-1	0.025	2.7	Normal	85.0	75	0.10	0.020	Min	0.033
	Ins-3	0.042	4.6	Normal	60.0	60	0.10	0.020	Min	0.031
	Comm	0.021	2.3	Normal	75.0	80	0.10	0.020	Min	0.033
	Com-1	0.002	0.2	Normal	70.0	70	0.10	0.020	Min	0.040
	Com-2	0.010	1.1	Normal	75.0	80	0.10	0.020	Min	0.035
	VACANT	0.057	6.2	Dry	15.0	5	0.10	0.030	Min	0.030
	WATER	0.050	5.4	Wet		100		0.001	Min	0.031
N17	OPEN	0.176	42.4	Dry	10.0		0.10	0.020	Min	0.027
	MDR	0.086	20.8	Normal	50.0	30	0.25	0.050	Low	0.056

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
N17	FWY	0.030	7.3	Normal	80.0	95	0.05	0.020	Low	0.062
	Ins-2	0.008	2.0	Normal	85.0	70	0.10	0.020	Min	0.035
	Ins-3	0.038	9.1	Normal	60.0	60	0.10	0.020	Min	0.031
	Comm	0.014	3.5	Normal	75.0	80	0.10	0.020	Min	0.034
	VACANT	0.062	15.0	Dry	15.0	5	0.10	0.030	Min	0.030
N18	OPEN	0.095	18.9	Dry	10.0		0.10	0.020	Min	0.029
	LDR	0.086	17.3	Normal	50.0	15	0.30	0.050	Low	0.056
	MDR	0.223	44.5	Normal	50.0	30	0.25	0.050	Low	0.050
	FWY	0.004	0.9	Normal	80.0	95	0.05	0.020	Low	0.074
	Ins-3	0.002	0.5	Normal	60.0	60	0.10	0.020	Min	0.039
	Com-2	0.019	3.8	Normal	75.0	80	0.10	0.020	Min	0.033
	VACANT	0.071	14.2	Dry	15.0	5	0.10	0.030	Min	0.030
N19A	Desert	0.023	4.9	Dry	25.0		0.35	0.030	Low	0.064
	Mountain	0.423	92.0	Dry	25.0		0.15	0.070	Hi	0.089
	WATER	0.014	3.1	Wet		100		0.001	Min	0.034
N19B	Desert	0.166	52.2	Dry	25.0		0.35	0.030	Low	0.052
	VLDR	0.152	47.8	Normal	30.0	5	0.30	0.050	Low	0.053
N19C	Desert	0.448	59.3	Dry	25.0		0.35	0.030	Low	0.046
	MDR	0.283	37.4	Normal	50.0	30	0.25	0.050	Low	0.049
	Ind	0.014	1.8	Normal	60.0	55	0.15	0.030	Min	0.034
	Park	0.011	1.5	Normal	90.0		0.20	0.100	Hi	0.129
N19D	Desert	0.393	100.0	Dry	25.0		0.35	0.030	Low	0.047
N19E	Desert	0.703	100.0	Dry	25.0		0.35	0.030	Low	0.044
N19F	Desert	0.374	100.0	Dry	25.0		0.35	0.030	Low	0.047
N20	OPEN	0.121	33.8	Dry	10.0		0.10	0.020	Min	0.028
	FWY	0.006	1.8	Normal	80.0	95	0.05	0.020	Low	0.072
	Ind	0.008	2.2	Normal	60.0	55	0.15	0.030	Min	0.036
	Ins-3	0.036	10.0	Normal	60.0	60	0.10	0.020	Min	0.032
	ORC	0.083	23.2	Wet	85.0		0.50	0.100	Hi	0.107
	VACANT	0.019	5.4	Dry	15.0	5	0.10	0.030	Min	0.033
	WATER	0.084	23.7	Wet		100		0.001	Min	0.029
N21	Agr	0.065	10.4	Wet	85.0		0.50	0.100	Hi	0.110

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	Desert	0.177	28.5	Dry	25.0		0.35	0.030	Low	0.052
	OPEN	0.040	6.4	Dry	10.0		0.10	0.020	Min	0.031
	LDR	0.016	2.5	Normal	50.0	15	0.30	0.050	Low	0.066
	MDR	0.110	17.7	Normal	50.0	30	0.25	0.050	Low	0.055
	FWY	0.006	0.9	Normal	80.0	95	0.05	0.020	Low	0.072
	Ind	0.003	0.5	Normal	60.0	55	0.15	0.030	Min	0.038
	Ins-4	0.072	11.5	Normal	75.0	90	0.10	0.020	Min	0.030
	Comm	0.011	1.8	Normal	75.0	80	0.10	0.020	Min	0.035
	Com-2	0.015	2.5	Normal	75.0	80	0.10	0.020	Min	0.034
	ORC	0.044	7.1	Wet	85.0		0.50	0.100	Hi	0.114
	WATER	0.064	10.2	Wet		100		0.001	Min	0.030
N21A1	VACANT	0.002	7.5	*	15.0	5	0.10	0.030	Min	0.040
	MDR	0.020	92.5	*	50.0	30	0.25	0.050	Low	0.065
N21A10	MDR	0.043	100.0	*	50.0	30	0.25	0.050	Low	0.060
N21A11	MDR	0.005	32.2	*	50.0	30	0.25	0.050	Low	0.073
	Park	0.010	67.8	*	90.0		0.20	0.100	Hi	0.130
N21A12	MDR	0.013	100.0	*	50.0	30	0.25	0.050	Low	0.067
N21A13	MDR	0.020	100.0	*	50.0	30	0.25	0.050	Low	0.065
N21A14	MDR	0.007	11.8	*	50.0	30	0.25	0.050	Low	0.071
	Park	0.042	69.0	*	90.0		0.20	0.100	Hi	0.114
	Comm	0.004	6.0	*	75.0	80	0.10	0.020	Min	0.038
	VACANT	0.008	13.3	Dry	15.0	5	0.10	0.030	Min	0.036
N21A15	MDR	0.012	80.0	*	50.0	30	0.25	0.050	Low	0.068
	Park	0.003	20.0	*	90.0		0.20	0.100	Hi	0.143
N21A16	MDR	0.022	100.0	*	50.0	30	0.25	0.050	Low	0.064
N21A17	MDR	0.006	58.7	*	50.0	30	0.25	0.050	Low	0.072
	Park	0.005	41.3	*	90.0		0.20	0.100	Hi	0.139
N21A18	MDR	0.025	100.0	*	50.0	30	0.25	0.050	Low	0.063
N21A19	MDR	0.006	100.0	*	50.0	30	0.25	0.050	Low	0.072
N21A2	MDR	0.009	100.0	*	50.0	30	0.25	0.050	Low	0.070

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
N21A20	MDR	0.001	42.3	*	50.0	30	0.25	0.050	Low	0.082
	Park	0.002	57.7	*	90.0		0.20	0.100	Hi	0.150
N21A21	MFR	0.014	89.5	*	50.0	45	0.25	0.050	Low	0.067
	WATER	0.002	10.5	*		100		0.001	Min	0.040
N21A22	FWY	0.007	100.0	*	80.0	95	0.05	0.020	Low	0.071
N21A23	MDR	0.025	100.0	*	50.0	30	0.25	0.050	Low	0.063
N21A24	MDR	0.018	100.0	*	50.0	30	0.25	0.050	Low	0.066
N21A25	Comm	0.004	100.0	*	75.0	80	0.10	0.020	Min	0.038
N21A26	MDR	0.026	100.0	*	50.0	30	0.25	0.050	Low	0.063
N21A27	Park	0.004	100.0	Normal	90.0		0.20	0.100	Hi	0.140
N21A28	Park	0.006	100.0	*	90.0		0.20	0.100	Hi	0.135
N21A29	MDR	0.017	100.0	*	50.0	30	0.25	0.050	Low	0.066
N21A3	MDR	0.015	91.2	*	50.0	30	0.25	0.050	Low	0.067
	MDR	0.001	8.8	*	50.0	30	0.25	0.050	Low	0.081
N21A30	MDR	0.024	100.0	*	50.0	30	0.25	0.050	Low	0.064
N21A31	MDR	0.017	100.0	*	50.0	30	0.25	0.050	Low	0.066
N21A32	Park	0.004	100.0	*	90.0		0.20	0.100	Hi	0.140
N21A33	VACANT	0.003	8.0	*	15.0	5	0.10	0.030	Min	0.038
	MDR	0.035	92.0	*	50.0	30	0.25	0.050	Low	0.061
N21A34	MDR	0.016	100.0	Normal	50.0	30	0.25	0.050	Low	0.066
N21A35	MDR	0.012	100.0	*	50.0	30	0.25	0.050	Low	0.068
N21A36	MDR	0.015	100.0	*	50.0	30	0.25	0.050	Low	0.066
N21A37	MDR	0.013	100.0	*	50.0	30	0.25	0.050	Low	0.067
N21A38	MDR	0.020	88.9	*	50.0	30	0.25	0.050	Low	0.065
	Park	0.003	11.1	*	90.0		0.20	0.100	Hi	0.145
N21A39	FWY	0.010	100.0	*	80.0	95	0.05	0.020	Low	0.069

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
N21A4	MDR	0.009	100.0	*	50.0	30	0.25	0.050	Low	0.070
N21A40	Park	0.008	16.5	*	90.0		0.20	0.100	Hi	0.132
	MDR	0.043	83.5	*	50.0	30	0.25	0.050	Low	0.060
N21A41	MDR	0.027	100.0	*	50.0	30	0.25	0.050	Low	0.063
N21A42	MDR	0.021	100.0	*	50.0	30	0.25	0.050	Low	0.065
N21A43	Park	0.002	60.5	*	90.0		0.20	0.100	Hi	0.146
	MDR	0.002	39.5	*	50.0	30	0.25	0.050	Low	0.080
N21A44	WATER	0.004	14.2	*		100		0.001	Min	0.038
	MFR	0.021	85.8	*	50.0	45	0.25	0.050	Low	0.064
N21A5	VACANT	0.001	13.0	*	15.0	5	0.10	0.030	Min	0.040
	Park	0.005	52.0	*	90.0		0.20	0.100	Hi	0.137
	MDR	0.004	35.0	*	50.0	30	0.25	0.050	Low	0.075
N21A6	MDR	0.019	100.0	*	50.0	30	0.25	0.050	Low	0.065
N21A7	MDR	0.013	100.0	*	50.0	30	0.25	0.050	Low	0.067
N21A8	Park	0.009	100.0	*	90.0		0.20	0.100	Hi	0.131
N21A9	MDR	0.024	100.0	*	50.0	30	0.25	0.050	Low	0.064
N21A90	Comm	0.001	4.1	*	75.0	80	0.10	0.020	Min	0.043
	VACANT	0.002	18.9	*	15.0	5	0.10	0.030	Min	0.039
	FWY	0.009	73.0	*	80.0	95	0.05	0.020	Low	0.070
	MDR	0.001	4.1	*	50.0	30	0.25	0.050	Low	0.087
N21A91	FWY	0.005	100.0	*	80.0	95	0.05	0.020	Low	0.073
N21A92	VACANT	0.001	13.1	*	15.0	5	0.10	0.030	Min	0.042
	FWY	0.005	86.9	*	80.0	95	0.05	0.020	Low	0.073
N21AP1	WATER	0.007	42.4	*		100		0.001	Min	0.036
	Park	0.002	9.3	*	90.0		0.20	0.100	Hi	0.150
	MDR	0.008	48.3	*	50.0	30	0.25	0.050	Low	0.070
N21AP2	WATER	0.001	7.4	*		100		0.001	Min	0.041
	Park	0.001	9.5	*	90.0		0.20	0.100	Hi	0.151

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
N21AP2	MDR	0.012	83.1	*	50.0	30	0.25	0.050	Low	0.068
N21AP3	WATER	0.003	35.1	*		100		0.001	Min	0.038
	Park	0.001	9.6	*	90.0		0.20	0.100	Hi	0.156
	MDR	0.005	55.3	*	50.0	30	0.25	0.050	Low	0.073
N21AP4	WATER	0.013	44.5	*		100		0.001	Min	0.034
	Park	0.009	30.8	*	90.0		0.20	0.100	Hi	0.131
	MDR	0.007	24.7	*	50.0	30	0.25	0.050	Low	0.071
N21AP5	WATER	0.003	34.7	*		100		0.001	Min	0.039
	MDR	0.002	25.0	*	50.0	30	0.25	0.050	Low	0.079
	Park	0.003	40.3	*	90.0		0.20	0.100	Hi	0.143
N21C	OPEN	0.011	2.7	Dry	10.0		0.10	0.020	Min	0.035
	LDR	0.001	0.2	Normal	50.0	15	0.30	0.050	Low	0.086
	MDR	0.185	46.9	Normal	50.0	30	0.25	0.050	Low	0.052
	Ins-3	0.017	4.2	Normal	60.0	60	0.10	0.020	Min	0.034
	ORC	0.025	6.5	Wet	85.0		0.50	0.100	Hi	0.120
	VACANT	0.012	3.1	Dry	15.0	5	0.10	0.030	Min	0.034
	VACANT-1	0.142	36.1	Dry		10	0.10	0.300	Min	0.028
	WATER	0.002	0.4	Wet		100		0.001	Min	0.040
N21D	MDR	0.000	0.2	Normal	50.0	30	0.25	0.050	Low	0.096
	VACANT-1	0.053	99.8	Dry		10	0.10	0.300	Min	0.030
N21E	LDR	0.008	12.8	Normal	50.0	15	0.30	0.050	Low	0.070
	MDR	0.053	84.6	Normal	50.0	30	0.25	0.050	Low	0.059
	VACANT-1	0.002	2.5	Dry		10	0.10	0.300	Min	0.040
N21F	VLDR	0.001	0.9	Normal	30.0	5	0.30	0.050	Low	0.083
	LDR	0.103	99.1	Normal	50.0	15	0.30	0.050	Low	0.055
N21G	Desert	0.007	10.5	Dry	25.0		0.35	0.030	Low	0.071
	LDR	0.056	88.9	Normal	50.0	15	0.30	0.050	Low	0.059
	MDR	0.000	0.6	Normal	50.0	30	0.25	0.050	Low	0.088
N21H	Desert	0.000	0.6	Dry	25.0		0.35	0.030	Low	0.092
	LDR	0.033	99.1	Normal	50.0	15	0.30	0.050	Low	0.062
	MDR	0.000	0.3	Normal	50.0	30	0.25	0.050	Low	0.096

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
N21I	Desert	0.046	16.8	Dry	25.0		0.35	0.030	Low	0.060
	OPEN	0.010	3.6	Dry	10.0		0.10	0.020	Min	0.035
	VLDR	0.153	55.9	Normal	30.0	5	0.30	0.050	Low	0.053
	VACANT	0.040	14.6	Dry	15.0	5	0.10	0.030	Min	0.031
	VACANT-1	0.025	9.1	Dry		10	0.10	0.300	Min	0.032
N21J	Desert	0.172	74.3	Dry	25.0		0.35	0.030	Low	0.052
	VLDR	0.059	25.6	Normal	30.0	5	0.30	0.050	Low	0.058
	VACANT	0.000	0.1	Dry	15.0	5	0.10	0.030	Min	0.044
N21K	Desert	0.156	68.3	Dry	25.0		0.35	0.030	Low	0.053
	VLDR	0.073	31.7	Normal	30.0	5	0.30	0.050	Low	0.057
N21Z	Desert	0.017	15.9	Dry	25.0		0.35	0.030	Low	0.066
	VLDR	0.020	18.2	Normal	30.0	5	0.30	0.050	Low	0.065
	VACANT	0.029	26.3	Dry	15.0	5	0.10	0.030	Min	0.032
	VACANT-1	0.043	39.6	Dry		10	0.10	0.300	Min	0.031
N22	OPEN	0.033	3.5	Dry	10.0		0.10	0.020	Min	0.032
	VLDR	0.000		Normal	30.0	5	0.30	0.050	Low	0.090
	MDR	0.098	10.4	Normal	50.0	30	0.25	0.050	Low	0.055
	MHDR	0.000		Normal	50.0	40	0.25	0.050	Low	0.088
	MFR	0.021	2.2	Normal	50.0	45	0.25	0.050	Low	0.065
	Com-2	0.041	4.3	Normal	75.0	80	0.10	0.020	Min	0.031
	ORC	0.222	23.4	Wet	85.0		0.50	0.100	Hi	0.096
	VACANT	0.052	5.5	Dry	15.0	5	0.10	0.030	Min	0.030
	VACANT-1	0.006	0.6	Dry		10	0.10	0.300	Min	0.036
	OPEN	0.033	3.5	Dry	10.0		0.10	0.020	Min	0.032
	VLDR	0.000		Normal	30.0	5	0.30	0.050	Low	0.090
	MDR	0.098	10.4	Normal	50.0	30	0.25	0.050	Low	0.055
	MHDR	0.000		Normal	50.0	40	0.25	0.050	Low	0.088
	MFR	0.021	2.2	Normal	50.0	45	0.25	0.050	Low	0.065
	Com-2	0.041	4.3	Normal	75.0	80	0.10	0.020	Min	0.031
	ORC	0.222	23.4	Wet	85.0		0.50	0.100	Hi	0.096
	VACANT	0.052	5.5	Dry	15.0	5	0.10	0.030	Min	0.030
	VACANT-1	0.006	0.6	Dry		10	0.10	0.300	Min	0.036
N22A	OPEN	0.038	21.4	Dry	10.0		0.10	0.020	Min	0.031
	VLDR	0.025	14.0	Normal	30.0	5	0.30	0.050	Low	0.063

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	MDR	0.092	51.5	Normal	50.0	30	0.25	0.050	Low	0.056
	Com-2	0.023	12.9	Normal	75.0	80	0.10	0.020	Min	0.033
	VACANT-1	0.000	0.2	Dry		10	0.10	0.300	Min	0.044
N22B	Desert	0.018	9.9	Dry	25.0		0.35	0.030	Low	0.065
	VLDR	0.166	89.8	Normal	30.0	5	0.30	0.050	Low	0.052
	LDR	0.000	0.1	Normal	50.0	15	0.30	0.050	Low	0.096
	MDR	0.000	0.2	Normal	50.0	30	0.25	0.050	Low	0.088
N23	Desert	0.053	13.7	Dry	25.0		0.35	0.030	Low	0.059
	LDR	0.000	0.1	Normal	50.0	15	0.30	0.050	Low	0.090
	MDR	0.026	6.7	Normal	50.0	30	0.25	0.050	Low	0.063
	Com-1	0.018	4.6	Normal	70.0	70	0.10	0.020	Min	0.033
	ORC	0.056	14.3	Wet	85.0		0.50	0.100	Hi	0.111
	VACANT	0.112	28.8	Dry	15.0	5	0.10	0.030	Min	0.028
	VACANT-1	0.124	31.9	Dry		10	0.10	0.300	Min	0.028
N23A	Desert	0.002	0.3	Dry	25.0		0.35	0.030	Low	0.080
	OPEN	0.023	4.7	Dry	10.0		0.10	0.020	Min	0.033
	MDR	0.429	88.5	Normal	50.0	30	0.25	0.050	Low	0.046
	Ins-3	0.010	2.1	Normal	60.0	60	0.10	0.020	Min	0.035
	Com-2	0.022	4.5	Normal	75.0	80	0.10	0.020	Min	0.033
N24	Desert	0.093	86.3	Dry	25.0		0.35	0.030	Low	0.056
	MDR	0.008	7.4	Normal	50.0	30	0.25	0.050	Low	0.070
	Ind	0.007	6.3	Normal	60.0	55	0.15	0.030	Min	0.036
N24A	Desert	0.000	0.2	Dry	25.0		0.35	0.030	Low	0.088
	OPEN	0.040	16.5	Dry	10.0		0.10	0.020	Min	0.031
	MDR	0.121	50.4	Normal	50.0	30	0.25	0.050	Low	0.054
	Ins-3	0.048	19.9	Normal	60.0	60	0.10	0.020	Min	0.031
	Com-1	0.018	7.6	Normal	70.0	70	0.10	0.020	Min	0.033
	VACANT	0.013	5.5	Dry	15.0	5	0.10	0.030	Min	0.034
N24B	Desert	0.012	17.6	Dry	25.0		0.35	0.030	Low	0.068
	OPEN	0.000	0.6	Dry	10.0		0.10	0.020	Min	0.044
	VLDR	0.051	74.5	Normal	30.0	5	0.30	0.050	Low	0.059
	LDR	0.000	0.1	Normal	50.0	15	0.30	0.050	Low	0.096
	MDR	0.003	4.5	Normal	50.0	30	0.25	0.050	Low	0.076

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
N24B	Ins-3	0.002	2.6	Normal	60.0	60	0.10	0.020	Min	0.040
N24C	Com-1	0.001	0.5	Normal	70.0	70	0.10	0.020	Min	0.041
	Desert	0.003	1.6	Dry	25.0		0.35	0.030	Low	0.076
	LDR	0.001	0.5	Normal	50.0	15	0.30	0.050	Low	0.083
	MDR	0.179	96.8	Normal	50.0	30	0.25	0.050	Low	0.052
	VACANT	0.001	0.5	Dry	15.0	5	0.10	0.030	Min	0.041
N24D	Desert	0.040	45.8	Dry	25.0		0.35	0.030	Low	0.061
	LDR	0.001	0.9	Normal	50.0	15	0.30	0.050	Low	0.084
	Ind	0.047	53.3	Normal	60.0	55	0.15	0.030	Min	0.031
N24E	Desert	0.021	99.5	Dry	25.0		0.35	0.030	Low	0.065
	Ind	0.000	0.5	Normal	60.0	55	0.15	0.030	Min	0.047
N24F	Desert	0.105	99.2	Dry	25.0		0.35	0.030	Low	0.055
	LDR	0.001	0.8	Normal	50.0	15	0.30	0.050	Low	0.084
N24G	Desert	0.361	82.1	Dry	25.0		0.35	0.030	Low	0.047
	VLDR	0.067	15.2	Normal	30.0	5	0.30	0.050	Low	0.058
	VACANT	0.012	2.7	Dry	15.0	5	0.10	0.030	Min	0.034
N24H	Desert	0.286	100.0	Dry	25.0		0.35	0.030	Low	0.049
N24I	Desert	0.300	100.0	Dry	25.0		0.35	0.030	Low	0.049
N24J	Desert	0.121	100.0	Dry	25.0		0.35	0.030	Low	0.054
N24K	Desert	0.212	100.0	Dry	25.0		0.35	0.030	Low	0.051
N24L	Desert	0.381	100.0	Dry	25.0		0.35	0.030	Low	0.047
N24M	Desert	0.246	100.0	Dry	25.0		0.35	0.030	Low	0.050
N24N	Desert	0.130	100.0	Dry	25.0		0.35	0.030	Low	0.054
N24O	Desert	0.155	100.0	Dry	25.0		0.35	0.030	Low	0.053
N24P	Desert	0.122	100.0	Dry	25.0		0.35	0.030	Low	0.054
N24Q	Desert	0.037	100.0	Dry	25.0		0.35	0.030	Low	0.061
N24R	Desert	0.033	100.0	Dry	25.0		0.35	0.030	Low	0.062
N24S	Desert	0.048	100.0	Dry	25.0		0.35	0.030	Low	0.060

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
N24T	Desert	0.018	100.0	Dry	25.0		0.35	0.030	Low	0.066
N24U	Desert	0.113	100.0	Dry	25.0		0.35	0.030	Low	0.054
N24V	Desert	0.046	100.0	Dry	25.0		0.35	0.030	Low	0.060
N25	Desert	0.236	97.3	Dry	25.0		0.35	0.030	Low	0.050
	VLDR	0.007	2.7	Normal	30.0	5	0.30	0.050	Low	0.071
N25A	Desert	0.092	96.8	Dry	25.0		0.35	0.030	Low	0.056
	VLDR	0.003	3.2	Normal	30.0	5	0.30	0.050	Low	0.076
N25B	Desert	0.059	52.4	Dry	25.0		0.35	0.030	Low	0.058
	VLDR	0.045	39.5	Normal	30.0	5	0.30	0.050	Low	0.060
	VACANT-1	0.009	8.1	Dry		10	0.10	0.300	Min	0.035
N25C	Desert	0.099	58.8	Dry	25.0		0.35	0.030	Low	0.055
	VLDR	0.062	37.1	Normal	30.0	5	0.30	0.050	Low	0.058
	LDR	0.005	3.2	Normal	50.0	15	0.30	0.050	Low	0.073
	VACANT-1	0.002	0.9	Dry		10	0.10	0.300	Min	0.040
N25D	Desert	0.065	32.3	Dry	25.0		0.35	0.030	Low	0.058
	VLDR	0.121	59.9	Normal	30.0	5	0.30	0.050	Low	0.054
	Ins-3	0.000	0.1	Normal	60.0	60	0.10	0.020	Min	0.044
	Com-1	0.007	3.3	Normal	70.0	70	0.10	0.020	Min	0.036
	VACANT-1	0.009	4.3	Dry		10	0.10	0.300	Min	0.035
N25E	Desert	0.124	45.7	Dry	25.0		0.35	0.030	Low	0.054
	VLDR	0.060	22.1	Normal	30.0	5	0.30	0.050	Low	0.058
	MDR	0.055	20.2	Normal	50.0	30	0.25	0.050	Low	0.059
	VACANT-1	0.033	12.0	Dry		10	0.10	0.300	Min	0.032
N25F	Desert	0.067	76.7	Dry	25.0		0.35	0.030	Low	0.058
	VLDR	0.020	23.3	Normal	30.0	5	0.30	0.050	Low	0.065
N25G	Desert	0.038	62.0	Dry	25.0		0.35	0.030	Low	0.061
	VLDR	0.023	38.0	Normal	30.0	5	0.30	0.050	Low	0.064
N25H	Desert	0.068	99.6	Dry	25.0		0.35	0.030	Low	0.058
	VLDR	0.000	0.4	Normal	30.0	5	0.30	0.050	Low	0.090
N25I	Desert	0.083	70.6	Dry	25.0		0.35	0.030	Low	0.056

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	VLDR	0.035	29.4	Normal	30.0	5	0.30	0.050	Low	0.062
N25J	Desert	0.100	100.0	Dry	25.0		0.35	0.030	Low	0.055
N25K	Desert	0.061	67.0	Dry	25.0		0.35	0.030	Low	0.058
	VLDR	0.006	6.2	Normal	30.0	5	0.30	0.050	Low	0.072
	VACANT	0.001	0.6	Dry	15.0	5	0.10	0.030	Min	0.043
	VACANT-1	0.024	26.2	Dry		10	0.10	0.300	Min	0.033
N25L	Desert	0.030	50.9	Dry	25.0		0.35	0.030	Low	0.062
	VACANT	0.029	49.1	Dry	15.0	5	0.10	0.030	Min	0.032
N25M	Desert	0.024	10.2	Dry	25.0		0.35	0.030	Low	0.064
	MDR	0.212	89.8	Normal	50.0	30	0.25	0.050	Low	0.051
N25N	MDR	0.025	100.0	Normal	50.0	30	0.25	0.050	Low	0.064
N25O	Desert	0.032	24.8	Dry	25.0		0.35	0.030	Low	0.062
	MDR	0.063	48.4	Normal	50.0	30	0.25	0.050	Low	0.058
	VACANT-1	0.035	26.8	Dry		10	0.10	0.300	Min	0.032
N25P	Desert	0.170	98.9	Dry	25.0		0.35	0.030	Low	0.052
	MDR	0.002	1.1	Normal	50.0	30	0.25	0.050	Low	0.079
N25Q	Desert	0.027	92.5	Dry	25.0		0.35	0.030	Low	0.063
	MDR	0.002	7.5	Normal	50.0	30	0.25	0.050	Low	0.078
N25R	Desert	0.087	93.2	Dry	25.0		0.35	0.030	Low	0.056
	MDR	0.006	6.8	Normal	50.0	30	0.25	0.050	Low	0.072
N25S	Desert	0.025	92.9	Dry	25.0		0.35	0.030	Low	0.064
	MDR	0.002	7.1	Normal	50.0	30	0.25	0.050	Low	0.079
N26	Desert	0.040	100.0	Dry	25.0		0.35	0.030	Low	0.061
N26A	Desert	0.122	34.5	Dry	25.0		0.35	0.030	Low	0.054
	VLDR	0.035	9.8	Normal	30.0	5	0.30	0.050	Low	0.061
	LDR	0.029	8.2	Normal	50.0	15	0.30	0.050	Low	0.063
	MDR	0.073	20.7	Normal	50.0	30	0.25	0.050	Low	0.057
	VACANT	0.095	26.9	Dry	15.0	5	0.10	0.030	Min	0.029
N26B	Desert	0.007	3.2	Dry	25.0		0.35	0.030	Low	0.071
	LDR	0.002	1.0	Normal	50.0	15	0.30	0.050	Low	0.078

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	MDR	0.080	35.7	Normal	50.0	30	0.25	0.050	Low	0.056
	VACANT-1	0.135	60.1	Dry		10	0.10	0.300	Min	0.028
N27	Desert	0.260	92.2	Dry	25.0		0.35	0.030	Low	0.049
	FWY	0.022	7.8	Normal	80.0	95	0.05	0.020	Low	0.064
N27A	Desert	0.103	90.9	Dry	25.0		0.35	0.030	Low	0.055
	VACANT	0.010	8.8	Dry	15.0	5	0.10	0.030	Min	0.035
	VACANT-1	0.000	0.3	Dry		10	0.10	0.300	Min	0.044
N27B	Desert	0.080	98.0	Dry	25.0		0.35	0.030	Low	0.057
	VACANT-1	0.002	2.0	Dry		10	0.10	0.300	Min	0.040
N27C	Desert	0.086	100.0	Dry	25.0		0.35	0.030	Low	0.056
N27D	Desert	0.000	0.1	Dry	25.0		0.35	0.030	Low	0.096
	MDR	0.060	67.3	Normal	50.0	30	0.25	0.050	Low	0.058
	VACANT-1	0.029	32.6	Dry		10	0.10	0.300	Min	0.032
N27E	Desert	0.185	98.4	Dry	25.0		0.35	0.030	Low	0.051
	FWY	0.003	1.6	Normal	80.0	95	0.05	0.020	Low	0.076
N27F	Desert	0.283	99.5	Dry	25.0		0.35	0.030	Low	0.049
	FWY	0.002	0.5	Normal	80.0	95	0.05	0.020	Low	0.080
N27G	Desert	0.262	100.0	Dry	25.0		0.35	0.030	Low	0.049
N27H	Desert	0.211	100.0	Dry	25.0		0.35	0.030	Low	0.051
N27I	Desert	0.165	100.0	Dry	25.0		0.35	0.030	Low	0.052
N27J	Desert	0.182	97.3	Dry	25.0		0.35	0.030	Low	0.052
	MDR	0.003	1.8	Normal	50.0	30	0.25	0.050	Low	0.075
	Ins-3	0.002	0.8	Normal	60.0	60	0.10	0.020	Min	0.040
	VACANT-1	0.000	0.1	Dry		10	0.10	0.300	Min	0.047
N27K	Desert	0.624	99.8	Dry	25.0		0.35	0.030	Low	0.044
	Ins-3	0.002	0.2	Normal	60.0	60	0.10	0.020	Min	0.040
N27L	Desert	0.441	94.4	Dry	25.0		0.35	0.030	Low	0.046
	MDR	0.001	0.3	Normal	50.0	30	0.25	0.050	Low	0.081
	Ins-3	0.025	5.3	Normal	60.0	60	0.10	0.020	Min	0.033

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
S01	Agr	0.003	1.3	Wet	85.0		0.50	0.100	Hi	0.142
	Open-2	0.026	10.1	Normal	95.0	2	0.20	0.020	Min	0.032
	MDR	0.022	8.6	Normal	50.0	30	0.25	0.050	Low	0.064
	MHDR	0.180	70.6	Normal	50.0	40	0.25	0.050	Low	0.052
	MFR	0.006	2.5	Normal	50.0	45	0.25	0.050	Low	0.072
	Ins-3	0.001	0.5	Normal	60.0	60	0.10	0.020	Min	0.041
	Com-1	0.004	1.5	Normal	70.0	70	0.10	0.020	Min	0.038
	Com-2	0.007	2.7	Normal	75.0	80	0.10	0.020	Min	0.036
	VACANT	0.006	2.2	Dry	15.0	5	0.10	0.030	Min	0.037
S01A	Agr	0.001	0.3	Wet	85.0		0.50	0.100	Hi	0.155
	Open-2	0.105	30.0	Normal	95.0	2	0.20	0.020	Min	0.029
	MDR	0.080	22.8	Normal	50.0	30	0.25	0.050	Low	0.057
	MHDR	0.154	43.8	Normal	50.0	40	0.25	0.050	Low	0.053
	MFR	0.003	0.7	Normal	50.0	45	0.25	0.050	Low	0.077
	Com-1	0.000	0.1	Normal	70.0	70	0.10	0.020	Min	0.044
	Com-2	0.008	2.2	Normal	75.0	80	0.10	0.020	Min	0.036
	VACANT	0.000	0.1	Dry	15.0	5	0.10	0.030	Min	0.044
S01B	MDR	0.043	13.8	Normal	50.0	30	0.25	0.050	Low	0.060
	MHDR	0.254	81.8	Normal	50.0	40	0.25	0.050	Low	0.050
	Ins-3	0.002	0.6	Normal	60.0	60	0.10	0.020	Min	0.039
	Com-2	0.012	3.8	Normal	75.0	80	0.10	0.020	Min	0.035
S01C	OPEN	0.022	5.6	Dry	10.0		0.10	0.020	Min	0.033
	Open-2	0.032	8.0	Normal	95.0	2	0.20	0.020	Min	0.032
	MDR	0.160	39.9	Normal	50.0	30	0.25	0.050	Low	0.052
	MHDR	0.144	35.9	Normal	50.0	40	0.25	0.050	Low	0.053
	MFR	0.001	0.2	Normal	50.0	45	0.25	0.050	Low	0.086
	Ins-3	0.005	1.3	Normal	60.0	60	0.10	0.020	Min	0.037
	Com-2	0.037	9.3	Normal	75.0	80	0.10	0.020	Min	0.031
S01D	Open-2	0.154	24.4	Normal	95.0	2	0.20	0.020	Min	0.028
	MDR	0.000		Normal	50.0	30	0.25	0.050	Low	0.090
	MHDR	0.408	64.8	Normal	50.0	40	0.25	0.050	Low	0.047
	MFR	0.043	6.9	Normal	50.0	45	0.25	0.050	Low	0.060
	Com-2	0.024	3.8	Normal	75.0	80	0.10	0.020	Min	0.033
S01E	Open-2	0.080	34.9	Normal	95.0	2	0.20	0.020	Min	0.029

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	MDR	0.003	1.1	Normal	50.0	30	0.25	0.050	Low	0.077
	MHDR	0.133	57.8	Normal	50.0	40	0.25	0.050	Low	0.053
	MFR	0.014	6.2	Normal	50.0	45	0.25	0.050	Low	0.067
S01F	Open-2	0.076	50.1	Normal	95.0	2	0.20	0.020	Min	0.029
	MDR	0.000	0.1	Normal	50.0	30	0.25	0.050	Low	0.096
	MHDR	0.056	37.2	Normal	50.0	40	0.25	0.050	Low	0.059
	MFR	0.019	12.6	Normal	50.0	45	0.25	0.050	Low	0.065
S01G	Open-2	0.076	26.9	Normal	95.0	2	0.20	0.020	Min	0.029
	MDR	0.039	13.9	Normal	50.0	30	0.25	0.050	Low	0.061
	MHDR	0.101	35.9	Normal	50.0	40	0.25	0.050	Low	0.055
	FWY	0.004	1.6	Normal	80.0	95	0.05	0.020	Low	0.074
	Com-2	0.010	3.5	Normal	75.0	80	0.10	0.020	Min	0.035
	Com-3	0.021	7.2	Normal	80.0	95	0.05	0.020	Min	0.033
	Com-4	0.031	11.1	Normal	75.0	85	0.10	0.020	Min	0.032
S01H	Open-2	0.112	34.4	Normal	95.0	2	0.20	0.020	Min	0.028
	MHDR	0.200	61.8	Normal	50.0	40	0.25	0.050	Low	0.051
	FWY	0.001	0.3	Normal	80.0	95	0.05	0.020	Low	0.083
	Com-2	0.007	2.0	Normal	75.0	80	0.10	0.020	Min	0.036
	Com-3	0.001	0.3	Normal	80.0	95	0.05	0.020	Min	0.041
	Water	0.004	1.2	Wet		100	0.05*	0.020 *	Min	0.038
S01I	Open-2	0.036	15.6	Normal	95.0	2	0.20	0.020	Min	0.031
	MHDR	0.155	66.9	Normal	50.0	40	0.25	0.050	Low	0.053
	Ins-3	0.004	1.8	Normal	60.0	60	0.10	0.020	Min	0.037
	Com-2	0.036	15.7	Normal	75.0	80	0.10	0.020	Min	0.031
S10	MDR	0.096	85.6	Normal	50.0	30	0.25	0.050	Low	0.055
	FWY	0.016	14.2	Normal	80.0	95	0.05	0.020	Low	0.066
	Com-2	0.000	0.2	Normal	75.0	80	0.10	0.020	Min	0.046
S10A	MDR	0.040	88.4	Normal	50.0	30	0.25	0.050	Low	0.061
	MFR	0.002	5.1	Normal	50.0	45	0.25	0.050	Low	0.078
	FWY	0.000	0.2	Normal	80.0	95	0.05	0.020	Low	0.096
	Com-2	0.001	1.3	Normal	75.0	80	0.10	0.020	Min	0.043
	VACANT	0.002	5.1	Dry	15.0	5	0.10	0.030	Min	0.039
S10B	MDR	0.073	54.3	Normal	50.0	30	0.25	0.050	Low	0.057

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	MFR	0.062	45.7	Normal	50.0	45	0.25	0.050	Low	0.058
S10C	Open-2	0.003	0.8	Normal	95.0	2	0.20	0.020	Min	0.038
	MDR	0.037	9.8	Normal	50.0	30	0.25	0.050	Low	0.061
	MHDR	0.000	0.1	Normal	50.0	40	0.25	0.050	Low	0.090
	MFR	0.077	20.6	Normal	50.0	45	0.25	0.050	Low	0.057
	FWY	0.051	13.5	Normal	80.0	95	0.05	0.020	Low	0.059
	Ins-5	0.087	23.1	Normal	75.0	70	0.05	0.020	Min	0.029
	Com-2	0.032	8.7	Normal	75.0	80	0.10	0.020	Min	0.032
	Com-3	0.029	7.6	Normal	80.0	95	0.05	0.020	Min	0.032
	Com-4	0.051	13.7	Normal	75.0	85	0.10	0.020	Min	0.031
	VACANT	0.008	2.1	Dry	15.0	5	0.10	0.030	Min	0.036
S10D	MDR	0.164	35.8	Normal	50.0	30	0.25	0.050	Low	0.052
	MHDR	0.185	40.3	Normal	50.0	40	0.25	0.050	Low	0.052
	MFR	0.029	6.4	Normal	50.0	45	0.25	0.050	Low	0.062
	Com-2	0.020	4.3	Normal	75.0	80	0.10	0.020	Min	0.033
	Com-4	0.004	0.9	Normal	75.0	85	0.10	0.020	Min	0.038
	Water	0.056	12.3	Wet		100	0.05*	0.020 *	Min	0.030
S10E	Open-2	0.166	26.3	Normal	95.0	2	0.20	0.020	Min	0.027
	MDR	0.125	19.8	Normal	50.0	30	0.25	0.050	Low	0.054
	MHDR	0.285	45.1	Normal	50.0	40	0.25	0.050	Low	0.049
	Ins-5	0.003	0.5	Normal	75.0	70	0.05	0.020	Min	0.038
	Com-3	0.003	0.4	Normal	80.0	95	0.05	0.020	Min	0.039
	Water	0.050	7.8	Wet		100	0.05*	0.020 *	Min	0.031
S10F	Open-2	0.032	9.6	Normal	95.0	2	0.20	0.020	Min	0.032
	MDR	0.122	36.5	Normal	50.0	30	0.25	0.050	Low	0.054
	MHDR	0.180	53.9	Normal	50.0	40	0.25	0.050	Low	0.052
S10G	Open-2	0.043	15.1	Normal	95.0	2	0.20	0.020	Min	0.031
	MDR	0.076	26.9	Normal	50.0	30	0.25	0.050	Low	0.057
	MHDR	0.160	56.4	Normal	50.0	40	0.25	0.050	Low	0.052
	MFR	0.004	1.5	Normal	50.0	45	0.25	0.050	Low	0.074
	Com-2	0.000	0.1	Normal	75.0	80	0.10	0.020	Min	0.044
S10I	Open-2	0.032	24.1	Normal	95.0	2	0.20	0.020	Min	0.032
	MHDR	0.087	66.9	Normal	50.0	40	0.25	0.050	Low	0.056

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
S10I	Com-1	0.012	9.0	Normal	70.0	70	0.10	0.020	Min	0.035
S10J	Open-2	0.022	28.9	Normal	95.0	2	0.20	0.020	Min	0.033
	MHDR	0.055	71.1	Normal	50.0	40	0.25	0.050	Low	0.059
S10K	MHDR	0.287	85.0	Normal	50.0	40	0.25	0.050	Low	0.049
	Comm	0.016	4.9	Normal	75.0	80	0.10	0.020	Min	0.034
	Com-2	0.034	10.2	Normal	75.0	80	0.10	0.020	Min	0.032
S10M	Open-2	0.019	5.4	Normal	95.0	2	0.20	0.020	Min	0.033
	MHDR	0.308	87.3	Normal	50.0	40	0.25	0.050	Low	0.048
	Comm	0.026	7.3	Normal	75.0	80	0.10	0.020	Min	0.032
S10N	MHDR	0.136	99.9	Normal	50.0	40	0.25	0.050	Low	0.053
	Com-2	0.000	0.1	Normal	75.0	80	0.10	0.020	Min	0.046
S10O	Open-2	0.151	19.1	Normal	95.0	2	0.20	0.020	Min	0.028
	MHDR	0.612	77.2	Normal	50.0	40	0.25	0.050	Low	0.044
	Com-2	0.029	3.7	Normal	75.0	80	0.10	0.020	Min	0.032
S10P	Open-2	0.035	10.6	Normal	95.0	2	0.20	0.020	Min	0.032
	MDR	0.045	13.5	Normal	50.0	30	0.25	0.050	Low	0.060
	MHDR	0.160	48.6	Normal	50.0	40	0.25	0.050	Low	0.052
	MFR	0.010	3.0	Normal	50.0	45	0.25	0.050	Low	0.069
	Ind	0.010	3.0	Normal	60.0	55	0.15	0.030	Min	0.035
	Com-2	0.065	19.6	Normal	75.0	80	0.10	0.020	Min	0.030
	VACANT	0.006	1.7	Dry	15.0	5	0.10	0.030	Min	0.037
S10Q	MHDR	0.133	52.0	Normal	50.0	40	0.25	0.050	Low	0.053
	MFR	0.042	16.6	Normal	50.0	45	0.25	0.050	Low	0.060
	Com-2	0.080	31.4	Normal	75.0	80	0.10	0.020	Min	0.029
S10R	MHDR	0.032	98.8	Normal	50.0	40	0.25	0.050	Low	0.062
	Com-2	0.000	1.2	Normal	75.0	80	0.10	0.020	Min	0.044
S10S	MHDR	0.175	35.9	Normal	50.0	40	0.25	0.050	Low	0.052
	MFR	0.195	40.2	Normal	50.0	45	0.25	0.050	Low	0.051
	Com-2	0.107	22.0	Normal	75.0	80	0.10	0.020	Min	0.029
	VACANT	0.009	1.9	Dry	15.0	5	0.10	0.030	Min	0.035
S10T	Open-2	0.053	15.5	Normal	95.0	2	0.20	0.020	Min	0.030

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
S10T	MHDR	0.260	76.6	Normal	50.0	40	0.25	0.050	Low	0.049
	Com-2	0.027	7.9	Normal	75.0	80	0.10	0.020	Min	0.032
S10U	Open-2	0.049	45.7	Normal	95.0	2	0.20	0.020	Min	0.031
	MHDR	0.057	53.3	Normal	50.0	40	0.25	0.050	Low	0.059
	Com-2	0.000	0.2	Normal	75.0	80	0.10	0.020	Min	0.046
	VACANT	0.001	0.8	Dry	15.0	5	0.10	0.030	Min	0.041
S10V	OPEN	0.000	0.2	Dry	10.0		0.10	0.020	Min	0.044
	Open-2	0.000	0.1	Normal	95.0	2	0.20	0.020	Min	0.047
	MHDR	0.197	99.8	Normal	50.0	40	0.25	0.050	Low	0.051
S20	Open-2	0.014	10.0	Normal	95.0	2	0.20	0.020	Min	0.034
	MHDR	0.000	0.1	Normal	50.0	40	0.25	0.050	Low	0.092
	MFR	0.111	81.3	Normal	50.0	45	0.25	0.050	Low	0.055
	FWY	0.009	6.2	Normal	80.0	95	0.05	0.020	Low	0.070
	Ins-3	0.001	0.5	Normal	60.0	60	0.10	0.020	Min	0.042
	Com-1	0.003	1.8	Normal	70.0	70	0.10	0.020	Min	0.039
S20A	Open-2	0.017	10.3	Normal	95.0	2	0.20	0.020	Min	0.034
	MHDR	0.001	0.3	Normal	50.0	40	0.25	0.050	Low	0.087
	MFR	0.134	83.4	Normal	50.0	45	0.25	0.050	Low	0.053
	FWY	0.010	6.0	Normal	80.0	95	0.05	0.020	Low	0.069
S30	Desert	0.004	1.3	Dry	25.0		0.35	0.030	Low	0.074
	OPEN	0.023	7.3	Dry	10.0		0.10	0.020	Min	0.033
	Open-2	0.069	21.5	Normal	95.0	2	0.20	0.020	Min	0.030
	MHDR	0.206	64.3	Normal	50.0	40	0.25	0.050	Low	0.051
	Com-2	0.004	1.2	Normal	75.0	80	0.10	0.020	Min	0.038
	VACANT	0.014	4.5	Dry	15.0	5	0.10	0.030	Min	0.034
S30A	Open-2	0.196	36.9	Normal	95.0	2	0.20	0.020	Min	0.027
	MHDR	0.244	46.0	Normal	50.0	40	0.25	0.050	Low	0.050
	MFR	0.067	12.5	Normal	50.0	45	0.25	0.050	Low	0.058
	Com-2	0.024	4.6	Normal	75.0	80	0.10	0.020	Min	0.033
S30B	OPEN	0.003	0.8	Dry	10.0		0.10	0.020	Min	0.038
	Open-2	0.121	30.3	Normal	95.0	2	0.20	0.020	Min	0.028
	MDR	0.096	24.2	Normal	50.0	30	0.25	0.050	Low	0.055
	MHDR	0.139	34.9	Normal	50.0	40	0.25	0.050	Low	0.053

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
	MFR	0.009	2.3	Normal	50.0	45	0.25	0.050	Low	0.070
	Ind	0.007	1.6	Normal	60.0	55	0.15	0.030	Min	0.036
	Com-2	0.024	6.0	Normal	75.0	80	0.10	0.020	Min	0.033
S30C	Open-2	0.002	0.5	Normal	95.0	2	0.20	0.020	Min	0.039
	MDR	0.145	31.9	Normal	50.0	30	0.25	0.050	Low	0.053
	MHDR	0.252	55.4	Normal	50.0	40	0.25	0.050	Low	0.050
	Ind	0.002	0.4	Normal	60.0	55	0.15	0.030	Min	0.040
	Com-2	0.054	11.8	Normal	75.0	80	0.10	0.020	Min	0.030
S30D	Open-2	0.001	0.8	Normal	95.0	2	0.20	0.020	Min	0.041
	MDR	0.070	53.8	Normal	50.0	30	0.25	0.050	Low	0.057
	MHDR	0.059	45.4	Normal	50.0	40	0.25	0.050	Low	0.058

* Custom Value (not default value)

ACDC SUB-AREA MODEL

SUBBASIN INFORMATION

EXISTING SUBBASIN INFORMATION

Flood Control District of Maricopa County
ACDC EXISTING - GLENDALE/PEORIA ADMP UPDATE

Sub Basin Data

 5/16/2001

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Area ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
C386A	0.53	1.40	22.0	22.0	Urban	0.010	0.19	0.19 *	6.80	0.16	39	Tc (hrs)	0.46	0.35	0.32	0.28	0.26	0.25
												R (hrs)	0.30	0.22	0.19	0.17	0.16	0.15
C386B	0.54	1.53	17.0	17.0	Urban	0.010	0.20	0.17	7.00	0.14	36	Tc (hrs)	0.55	0.42	0.38	0.33	0.31	0.29
												R (hrs)	0.38	0.28	0.25	0.22	0.20	0.19
C387A	0.35	1.27	24.0	24.0	Urban	0.012	0.13	0.18	8.80	0.07	49	Tc (hrs)	0.43	0.35	0.31	0.28	0.26	0.25
												R (hrs)	0.32	0.25	0.22	0.20	0.18	0.18
C387B	0.34	1.18	19.0	19.0	Urban	0.014	0.27	0.25	5.40	0.24	16	Tc (hrs)	0.73	0.50	1.58	0.35	0.33	0.30
												R (hrs)	0.55	0.36	1.30	0.25	0.23	0.21
C387C	0.25	0.95	18.0	18.0	Urban	0.013	0.23	0.16	8.00	0.10	32	Tc (hrs)	0.45	0.35	0.31	0.28	0.26	0.25
												R (hrs)	0.33	0.25	0.22	0.19	0.17	0.17
C388A	0.26	0.92	17.0	17.0	Urban	0.012	0.24	0.26	5.70	0.25 *	30	Tc (hrs)	0.51	0.37	0.32	0.28	0.25	0.24
												R (hrs)	0.35	0.25	0.21	0.18	0.16	0.16
C388B	0.34	0.84	20.0	20.0	Urban	0.013	0.14	0.26	6.40	0.16 *	42	Tc (hrs)	0.40	0.31	0.28	0.25	0.24	0.23
												R (hrs)	0.22	0.16	0.14	0.13	0.12	0.11
C388C	0.05	0.45	23.0	23.0	Urban	0.021	0.20	0.15	7.60	0.12	45	Tc (hrs)	0.33	0.26	0.24	0.22	0.21	0.20
												R (hrs)	0.30	0.24	0.22	0.20	0.19	0.18
C388D	0.19	0.93	19.0	19.0	Urban	0.018	0.21	0.22	6.40	0.19	44	Tc (hrs)	0.57	0.44	0.39	0.34	0.32	0.30
												R (hrs)	0.48	0.36	0.31	0.27	0.25	0.23
C388E	0.15	0.82	13.0	13.0	Urban	0.018	0.20	0.28	5.60 *	0.23 *	30	Tc (hrs)	0.70	0.51	0.44	0.38	0.35	0.33
												R (hrs)	0.62	0.44	0.38	0.32	0.29	0.27
C389A	0.29	0.90	14.0	14.0	Urban	0.013	0.23	0.16	8.80	0.07	32	Tc (hrs)	0.48	0.37	0.33	0.30	0.28	0.26
												R (hrs)	0.30	0.23	0.20	0.18	0.16	0.16
C389B	0.13	0.75	16.0	16.0	Urban	0.019	0.22	0.15	8.40 *	0.09 *	42	Tc (hrs)	0.51	0.40	0.36	1.58	0.30	0.28
												R (hrs)	0.45	0.35	0.31	1.58	0.25	0.24
C389C	0.07	0.65	25.0	25.0	Urban	0.014	0.13	0.21	6.40	0.21	66	Tc (hrs)	0.30	0.25	0.23	0.21	0.20	0.19
												R (hrs)	0.32	0.25	0.23	0.22	0.20	0.19

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Area ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
C389D	0.03	0.26	15.0	15.0	Urban	0.024	0.25	0.15	8.40	0.09 *	30	Tc (hrs)	0.30	0.25	0.23	0.21	0.20	0.19
												R (hrs)	0.25	0.20	0.18	0.17	0.16	0.15
C389E	0.05	0.25	16.0	16.0	Urban	0.020	0.17	0.15	7.60	0.12 *	62	Tc (hrs)	0.24	0.21	0.20	0.18	0.17	0.16
												R (hrs)	0.14	0.12	0.11	0.10	0.10	0.09
C389F	0.11	1.19	15.0	15.0	Urban	0.011	0.10	0.30	8.00	0.07		Tc (hrs)	0.56	0.40	0.36	0.32	0.29	0.28
												R (hrs)	0.80	0.55	0.48	0.42	0.39	0.36
C390A	0.30	1.05	17.0	17.0	Urban	0.012	0.20	0.17	9.70	0.05	30	Tc (hrs)	0.45	0.35	0.32	0.29	0.27	0.25
												R (hrs)	0.31	0.24	0.22	0.19	0.18	0.17
C390B	0.20	0.62	17.0	17.0	Urban	0.018	0.23	0.15	8.00	0.10	39	Tc (hrs)	0.43	0.33	0.30	0.27	0.25	0.24
												R (hrs)	0.25	0.19	0.17	0.15	0.14	0.13
C390C	0.10	0.60	15.0	15.0	Urban	0.018	0.22	0.15	7.30 *	0.13 *	39	Tc (hrs)	0.45	0.35	0.31	0.28	0.26	0.25
												R (hrs)	0.38	0.29	0.26	0.23	0.21	0.20
C390D	0.07	0.51	15.0	15.0	Urban	0.018	0.25	0.19	6.60	0.17	30	Tc (hrs)	0.43	0.32	0.29	0.25	0.24	0.23
												R (hrs)	0.38	0.27	0.24	0.21	0.19	0.19
C390E	0.23	0.88	16.0	16.0	Urban	0.014	0.19	0.16	8.80	0.08	45	Tc (hrs)	0.45	0.36	0.33	0.29	0.27	0.25
												R (hrs)	0.32	0.25	0.22	0.20	0.18	0.17
C391A	0.11	0.67	14.0	14.0	Urban	0.020	0.24	0.15	8.80	0.07	38	Tc (hrs)	0.52	0.41	0.37	0.33	0.30	0.29
												R (hrs)	0.46	0.35	0.31	0.28	0.26	0.24
C391B	0.06	0.45	14.0	14.0	Urban	0.020	0.25	0.15	7.60	0.12 *	30	Tc (hrs)	0.42	0.32	0.29	0.25	0.24	0.23
												R (hrs)	0.39	0.29	0.25	0.22	0.21	0.20
C391C	0.07	0.59	14.0	14.0	Urban	0.019	0.25	0.13	10.10	0.04	30	Tc (hrs)	0.45	0.35	0.32	0.29	0.27	0.25
												R (hrs)	0.46	0.36	0.32	0.28	0.27	0.25
C391D	0.03	0.34	15.0	15.0	Urban	0.027	0.25	0.15	9.70	0.06	33	Tc (hrs)	0.39	0.31	0.28	0.25	0.24	0.23
												R (hrs)	0.41	0.31	0.28	0.25	0.23	0.22
C391E	0.09	0.53	15.0	15.0	Urban	0.017	0.25	0.15	8.00	0.10	30	Tc (hrs)	0.40	0.30	0.28	0.25	0.23	0.23
												R (hrs)	0.32	0.24	0.22	0.19	0.18	0.17

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Area ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
C391F	0.02	0.23	15.0	15.0	Urban	0.027	0.25	0.15	8.80	0.07	30	Tc (hrs)	0.30	0.24	0.23	0.21	0.20	0.19
												R (hrs)	0.28	0.23	0.21	0.19	0.18	0.17
C391G	0.02	0.32	11.0	11.0	Urban	0.015	0.10	0.15	9.70 *	0.06 *	75	Tc (hrs)	0.26	0.23	0.21	0.20	0.18	0.18
												R (hrs)	0.30	0.26	0.24	0.22	0.20	0.20
C391H	0.05	0.37	11.0	11.0	Urban	0.021	0.25	0.15	9.70	0.06	30	Tc (hrs)	0.40	0.31	0.28	0.25	0.24	0.23
												R (hrs)	0.35	0.27	0.24	0.21	0.20	0.19
C391I	0.06	0.49	18.0	18.0	Urban	0.020	0.25	0.19	6.60	0.17	30	Tc (hrs)	0.42	0.31	0.28	0.25	0.23	0.23
												R (hrs)	0.40	0.29	0.25	0.23	0.21	0.20
C391J	0.01	0.15	10.0	10.0	Urban	0.031	0.25	0.15	8.80	0.07	30	Tc (hrs)	0.29	0.24	0.22	0.20	0.19	0.18
												R (hrs)	0.32	0.26	0.24	0.22	0.20	0.19
C391K	0.03	0.30	15.0	15.0	Urban	0.025	0.25	0.25	5.20	0.30 *	30	Tc (hrs)	0.43	0.30	0.26	0.23	0.22	0.21
												R (hrs)	0.44	0.30	0.26	0.22	0.21	0.20
C391L	0.02	0.13	15.0	15.0	Urban	0.016	0.10	0.25	4.90	0.41	80	Tc (hrs)	0.16	0.14	0.13	0.12	0.11	0.11
												R (hrs)	0.10	0.09	0.08	0.07	0.07	0.07
C391M	0.01	0.07	36.0	36.0	Urban	0.017	0.10	0.25	5.60	0.31	80	Tc (hrs)	0.09	0.08	0.08	0.08	0.08	0.08
												R (hrs)	0.04	0.03	0.03	0.03	0.03	0.03
C391N	0.16	1.38	14.0	14.0	Urban	0.010	0.10	0.29	8.40	0.06		Tc (hrs)	0.59	0.43	0.38	0.33	0.31	0.29
												R (hrs)	0.76	0.53	0.46	0.41	0.37	0.35
C401A	0.14	0.70	17.0	17.0	Urban	0.018	0.21	0.23	7.00	0.12 *	33	Tc (hrs)	0.49	0.37	0.33	0.30	0.28	0.26
												R (hrs)	0.39	0.28	0.25	0.22	0.20	0.19
C401B	0.10	0.63	21.0	21.0	Urban	0.017	0.15	0.27	5.10	0.28 *	46	Tc (hrs)	0.41	0.31	0.28	0.25	0.23	0.22
												R (hrs)	0.35	0.26	0.23	0.20	0.19	0.18
C406A	0.10	0.51	13.0	13.0	Urban	0.020	0.19	0.27	5.30 *	0.25 *	36	Tc (hrs)	0.51	0.38	0.33	0.29	0.27	0.25
												R (hrs)	0.38	0.28	0.24	0.21	0.19	0.18
C406B	0.07	0.56	12.0	12.0	Urban	0.018	0.25	0.15	8.80	0.07	30	Tc (hrs)	0.46	0.36	0.33	0.29	0.27	0.25
												R (hrs)	0.44	0.33	0.30	0.26	0.24	0.23

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Area ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
C406C	0.07	0.59	9.0	9.0	Urban	0.019	0.23	0.15	8.00	0.10	36	Tc (hrs)	0.58	0.44	0.39	0.35	0.33	0.30
												R (hrs)	0.58	0.44	0.38	0.34	0.31	0.29
C406D	0.03	0.12	33.0	33.0	Urban	0.014	0.10	0.30	8.00	0.07		Tc (hrs)	0.12	0.10	0.09	0.08	0.08	0.08
												R (hrs)	0.04	0.04	0.03	0.03	0.03	0.03
C406E	0.05	0.45	10.0	10.0	Urban	0.020	0.25	0.25	4.80	0.36 *	30	Tc (hrs)	0.60	0.42	0.36	0.31	0.28	0.26
												R (hrs)	0.58	0.40	0.34	0.28	0.25	0.23
C406F	0.10	0.57	14.0	14.0	Urban	0.016	0.25	0.25	5.80 *	0.23 *	30	Tc (hrs)	0.48	0.35	0.30	0.26	0.25	0.23
												R (hrs)	0.38	0.27	0.23	0.20	0.18	0.17
C406G	0.11	0.97	14.0	14.0	Urban	0.016	0.17	0.30	4.90	0.28 *	15	Tc (hrs)	0.81	0.55	0.47	0.39	0.36	0.33
												R (hrs)	1.02	0.67	0.55	0.45	0.41	0.38
C406H	0.28	1.27	20.0	20.0	Urban	0.010	0.10	0.37	5.30	0.20		Tc (hrs)	1.50	0.40	0.34	0.29	0.26	0.25
												R (hrs)	1.45	0.33	0.28	0.23	0.21	0.20

* Non default value

EXISTING SOIL INFORMATION

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
C386A	Maricopa	C_LB	7.812	2.3	0.40		
	Maricopa	C_LCA	164.323	48.3	0.25		
	Maricopa	C_LE	47.743	14.0	0.04		
	Maricopa	C_MP	16.690	4.9	0.25		
	Maricopa	C_MR	35.197	10.3	0.05		
	Maricopa	C_RBA	3.041	0.9	0.26		
	Maricopa	C_TG	7.252	2.1	0.04		
	Maricopa	C_TW	42.169	12.4	0.05		
	Maricopa	C_VF	15.913	4.7	0.01		
C386B	Maricopa	C_AA	0.006		0.26		
	Maricopa	C_LB	0.146		0.40		
	Maricopa	C_LCA	164.031	47.4	0.25		
	Maricopa	C_LE	3.596	1.0	0.04		
	Maricopa	C_MP	0.025		0.25		
	Maricopa	C_MR	55.728	16.1	0.05		
	Maricopa	C_RBA	10.643	3.1	0.26		
	Maricopa	C_TG	9.707	2.8	0.04		
	Maricopa	C_TW	74.389	21.5	0.05		
	Maricopa	C_VF	27.829	8.0	0.01		
C387A	Maricopa	C_ES	7.532	3.4	0.25		
	Maricopa	C_LCA	20.653	9.2	0.25		
	Maricopa	C_LE	14.736	6.6	0.04		
	Maricopa	C_MR	110.440	49.2	0.05		
	Maricopa	C_MS	3.901	1.7	0.01		
	Maricopa	C_TG	2.063	0.9	0.04		
	Maricopa	C_TW	53.682	23.9	0.05		
	Maricopa	C_VF	11.603	5.2	0.01		
C387B	Maricopa	C_GXA	0.427	0.2	0.23		
	Maricopa	C_LCA	111.292	51.4	0.25		
	Maricopa	C_MP	43.882	20.3	0.25		
	Maricopa	C_MR	29.181	13.5	0.05		
	Maricopa	C_PEA	4.456	2.1	0.37		
	Maricopa	C_RBA	16.268	7.5	0.26		
	Maricopa	C_TG	3.284	1.5	0.04		
	Maricopa	C_TU	0.673	0.3	0.25		
	Maricopa	C_TW	7.067	3.3	0.05		
C387C	Maricopa	C_LCA	23.894	15.0	0.25		
	Maricopa	C_MP	1.572	1.0	0.25		
	Maricopa	C_MR	44.852	28.1	0.05		
	Maricopa	C_TG	0.472	0.3	0.04		
	Maricopa	C_TU	4.075	2.6	0.25		
	Maricopa	C_TW	84.765	53.1	0.05		
C388A	Maricopa	C_GXA	10.850	6.5	0.23		
	Maricopa	C_LCA	74.273	44.8	0.25		
	Maricopa	C_MP	22.819	13.8	0.25		
	Maricopa	C_MR	16.011	9.7	0.05		
	Maricopa	C_PEA	4.829	2.9	0.37		
	Maricopa	C_RBA	16.099	9.7	0.26		
	Maricopa	C_TU	4.751	2.9	0.25		
	Maricopa	C_TW	8.323	5.0	0.05		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
C388A	Maricopa	C_VF	7.890	4.8	0.01		
C388B	Maricopa	C_GXA	2.456	1.1	0.23		
	Maricopa	C_LCA	53.554	24.6	0.25		
	Maricopa	C_LE	1.645	0.8	0.04		
	Maricopa	C_MP	60.118	27.7	0.25		
	Maricopa	C_MR	66.399	30.5	0.05		
	Maricopa	C_RBA	8.294	3.8	0.26		
	Maricopa	C_TU	1.826	0.8	0.25		
	Maricopa	C_TW	22.686	10.4	0.05		
	Maricopa	C_VF	0.413	0.2	0.01		
C388C	Maricopa	C_LCA	8.761	26.0	0.25		
	Maricopa	C_MR	18.297	54.2	0.05		
	Maricopa	C_TW	6.701	19.8	0.05		
C388D	Maricopa	C_GXA	6.754	5.6	0.23		
	Maricopa	C_LCA	49.907	41.1	0.25		
	Maricopa	C_MP	12.914	10.6	0.25		
	Maricopa	C_MR	23.218	19.1	0.05		
	Maricopa	C_RBA	3.812	3.1	0.26		
	Maricopa	C_TU	6.533	5.4	0.25		
	Maricopa	C_TW	8.592	7.1	0.05		
	Maricopa	C_VF	9.779	8.0	0.01		
C388E	Maricopa	C_GXA	2.196	2.3	0.23		
	Maricopa	C_LCA	63.898	66.0	0.25		
	Maricopa	C_MP	13.535	14.0	0.25		
	Maricopa	C_MR	2.094	2.2	0.05		
	Maricopa	C_RBA	1.600	1.7	0.26		
	Maricopa	C_TW	10.982	11.3	0.05		
	Maricopa	C_VF	2.538	2.6	0.01		
C389A	Maricopa	C_GXA	2.165	1.2	0.23		
	Maricopa	C_LCA	10.176	5.4	0.25		
	Maricopa	C_LE	23.403	12.5	0.04		
	Maricopa	C_MR	115.979	62.0	0.05		
	Maricopa	C_MS	1.260	0.7	0.01		
	Maricopa	C_TG	27.395	14.7	0.04		
	Maricopa	C_VF	6.608	3.5	0.01		
C389B	Maricopa	C_GXA	0.283	0.3	0.23		
	Maricopa	C_LCA	25.533	31.4	0.25		
	Maricopa	C_MP	4.452	5.5	0.25		
	Maricopa	C_MR	30.883	38.0	0.05		
	Maricopa	C_TG	3.438	4.2	0.04		
	Maricopa	C_VF	16.670	20.5	0.01		
C389C	Maricopa	C_LCA	25.304	57.3	0.25		
	Maricopa	C_LE	1.803	4.1	0.04		
	Maricopa	C_MP	1.436	3.2	0.25		
	Maricopa	C_MR	14.494	32.8	0.05		
	Maricopa	C_TW	1.149	2.6	0.05		
	Maricopa	C_VF	0.005		0.01		
C389D	Maricopa	C_LCA	4.594	24.7	0.25		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
C389D	Maricopa	C_MR	9.338	50.3	0.05		
	Maricopa	C_MS	2.221	12.0	0.01		
	Maricopa	C_TG	2.429	13.1	0.04		
C389E	Maricopa	C_LCA	11.270	36.3	0.25		
	Maricopa	C_LE	6.693	21.6	0.04		
	Maricopa	C_MP	0.274	0.9	0.25		
	Maricopa	C_MR	11.214	36.1	0.05		
	Maricopa	C_VF	1.601	5.2	0.01		
C389F	Maricopa	C_LCA	18.778	27.2	0.25		
	Maricopa	C_LE	3.848	5.6	0.04		
	Maricopa	C_MR	41.333	59.8	0.05		
	Maricopa	C_MS	0.001		0.01		
	Maricopa	C_TG	0.013		0.04		
	Maricopa	C_VF	5.095	7.4	0.01		
C390A	Maricopa	C_LCA	6.718	3.5	0.25		
	Maricopa	C_LE	30.217	15.9	0.04		
	Maricopa	C_MR	54.719	28.8	0.05		
	Maricopa	C_TG	3.158	1.7	0.04		
	Maricopa	C_TW	52.588	27.7	0.05		
	Maricopa	C_VF	42.685	22.5	0.01		
C390B	Maricopa	C_LCA	32.582	26.0	0.25		
	Maricopa	C_LE	11.877	9.5	0.04		
	Maricopa	C_MR	52.745	42.0	0.05		
	Maricopa	C_TW	22.439	17.9	0.05		
	Maricopa	C_VF	5.826	4.6	0.01		
C390C	Maricopa	C_LCA	17.703	29.2	0.25		
	Maricopa	C_MR	32.858	54.2	0.05		
	Maricopa	C_TG	0.801	1.3	0.04		
	Maricopa	C_TU	6.311	10.4	0.25		
	Maricopa	C_TW	2.920	4.8	0.05		
C390D	Maricopa	C_LCA	28.133	60.5	0.25		
	Maricopa	C_MR	3.149	6.8	0.05		
	Maricopa	C_TW	12.207	26.2	0.05		
	Maricopa	C_VF	3.029	6.5	0.01		
C390E	Maricopa	C_LCA	36.474	24.8	0.25		
	Maricopa	C_LE	18.853	12.8	0.04		
	Maricopa	C_MR	36.938	25.1	0.05		
	Maricopa	C_TW	17.215	11.7	0.05		
	Maricopa	C_VF	37.878	25.7	0.01		
C391A	Maricopa	C_AO	4.595	6.7	0.04		
	Maricopa	C_LCA	4.208	6.1	0.25		
	Maricopa	C_LE	1.939	2.8	0.04		
	Maricopa	C_MR	16.189	23.5	0.05		
	Maricopa	C_TU	2.578	3.7	0.25		
	Maricopa	C_TW	32.993	47.9	0.05		
	Maricopa	C_VF	6.336	9.2	0.01		
C391B	Maricopa	C_AO	14.425	40.0	0.04		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
C391B	Maricopa	C_LCA	12.105	33.6	0.25		
	Maricopa	C_MR	7.618	21.1	0.05		
	Maricopa	C_TW	1.894	5.3	0.05		
C391C	Maricopa	C_LCA	1.053	2.5	0.25		
	Maricopa	C_LE	4.495	10.5	0.04		
	Maricopa	C_MR	3.268	7.6	0.05		
	Maricopa	C_TW	21.222	49.5	0.05		
	Maricopa	C_VF	12.806	29.9	0.01		
C391D	Maricopa	C_LE	8.823	46.6	0.04		
	Maricopa	C_MR	6.276	33.1	0.05		
	Maricopa	C_TW	1.456	7.7	0.05		
	Maricopa	C_VF	2.381	12.6	0.01		
C391E	Maricopa	C_GXA	0.698	1.3	0.23		
	Maricopa	C_LCA	13.613	24.7	0.25		
	Maricopa	C_LE	0.515	0.9	0.04		
	Maricopa	C_MR	16.592	30.1	0.05		
	Maricopa	C_TW	22.526	40.9	0.05		
	Maricopa	C_VF	1.139	2.1	0.01		
C391F	Maricopa	C_MR	5.340	44.1	0.05		
	Maricopa	C_TW	6.774	55.9	0.05		
C391G	Maricopa	C_AO	0.281	2.1	0.04		
	Maricopa	C_MR	10.027	75.6	0.05		
	Maricopa	C_TW	2.067	15.6	0.05		
	Maricopa	C_VF	0.885	6.7	0.01		
C391H	Maricopa	C_AO	5.973	20.1	0.04		
	Maricopa	C_LCA	2.255	7.6	0.25		
	Maricopa	C_LE	0.507	1.7	0.04		
	Maricopa	C_MR	3.459	11.7	0.05		
	Maricopa	C_TW	10.681	36.0	0.05		
	Maricopa	C_VF	6.801	22.9	0.01		
C391I	Maricopa	C_GXA	0.832	2.2	0.23		
	Maricopa	C_LCA	18.559	49.3	0.25		
	Maricopa	C_MP	0.813	2.2	0.25		
	Maricopa	C_MR	10.986	29.2	0.05		
	Maricopa	C_TW	6.473	17.2	0.05		
C391J	Maricopa	C_MR	4.975	91.9	0.05		
	Maricopa	C_TW	0.440	8.1	0.05		
C391K	Maricopa	C_LCA	12.154	73.5	0.25		
	Maricopa	C_MP	2.705	16.4	0.25		
	Maricopa	C_MR	1.685	10.2	0.05		
C391L	Maricopa	C_LCA	10.019	97.1	0.25		
	Maricopa	C_MR	0.065	0.6	0.05		
	Maricopa	C_TW	0.239	2.3	0.05		
C391M	Maricopa	C_LCA	6.547	81.2	0.25		
	Maricopa	C_LE	0.534	6.6	0.04		
	Maricopa	C_TW	0.980	12.2	0.05		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
C391N	Maricopa	C_LCA	12.421	13.6	0.25		
	Maricopa	C_LE	12.730	13.9	0.04		
	Maricopa	C_MR	37.648	41.1	0.05		
	Maricopa	C_TW	24.383	26.6	0.05		
	Maricopa	C_VF	4.483	4.9	0.01		
C401A	Maricopa	C_LCA	13.470	15.0	0.25		
	Maricopa	C_MP	25.022	27.9	0.25		
	Maricopa	C_MR	19.259	21.4	0.05		
	Maricopa	C_TC	2.064	2.3	0.40		
	Maricopa	C_TG	2.535	2.8	0.04		
	Maricopa	C_TW	23.350	26.0	0.05		
	Maricopa	C_VF	4.102	4.6	0.01		
C401B	Maricopa	C_GXA	0.505	0.8	0.23		
	Maricopa	C_LCA	55.378	87.3	0.25		
	Maricopa	C_LE	0.001		0.04		
	Maricopa	C_MR	2.669	4.2	0.05		
	Maricopa	C_PEB	0.139	0.2	0.38		
	Maricopa	C_TE	2.336	3.7	0.25		
	Maricopa	C_TG	0.121	0.2	0.04		
	Maricopa	C_TW	2.274	3.6	0.05		
C406A	Maricopa	C_LCA	51.850	81.9	0.25		
	Maricopa	C_MP	3.477	5.5	0.25		
	Maricopa	C_MR	7.994	12.6	0.05		
C406B	Maricopa	C_LCA	9.759	21.0	0.25		
	Maricopa	C_MP	0.095	0.2	0.25		
	Maricopa	C_MR	25.118	54.1	0.05		
	Maricopa	C_VF	11.495	24.7	0.01		
C406C	Maricopa	C_LCA	7.452	16.0	0.25		
	Maricopa	C_LE	2.598	5.6	0.04		
	Maricopa	C_MP	13.359	28.7	0.25		
	Maricopa	C_MR	12.130	26.0	0.05		
	Maricopa	C_VF	11.066	23.7	0.01		
C406D	Maricopa	C_LCA	0.020	0.1	0.25		
	Maricopa	C_MP	12.395	58.4	0.25		
	Maricopa	C_MR	1.495	7.0	0.05		
	Maricopa	C_VF	7.312	34.5	0.01		
C406E	Maricopa	C_LCA	16.364	47.3	0.25		
	Maricopa	C_MP	18.210	52.7	0.25		
C406F	Maricopa	C_LCA	35.689	54.6	0.25		
	Maricopa	C_MP	12.591	19.3	0.25		
	Maricopa	C_MR	17.067	26.1	0.05		
	Maricopa	C_VF	0.001		0.01		
C406G	Maricopa	C_LCA	60.096	87.1	0.25		
	Maricopa	C_MP	6.629	9.6	0.25		
	Maricopa	C_MR	2.247	3.3	0.05		
	Maricopa	C_TD	0.030		1.20		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
C406H	Maricopa	C_ABA	6.318	3.7	0.38		
	Maricopa	C_GGA	15.170	8.8	0.25		
	Maricopa	C_LCA	82.887	48.1	0.25		
	Maricopa	C_MP	27.387	15.9	0.25		
	Maricopa	C_MR	28.409	16.5	0.05		
	Maricopa	C_RBA	7.519	4.4	0.26		
	Maricopa	C_TD	1.346	0.8	1.20		
	Maricopa	C_TFA	2.965	1.7	0.37		
	Maricopa	C_VF	0.412	0.2	0.01		

* Custom Value (not default value)

* XKSAT value is zero.

EXISTING LAND USE INFORMATION

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
C386A	MDR	200.298	58.9	Normal	50.0	30	0.25	0.050	Low	0.010
	OPEN	45.043	13.2	Dry	10.0		0.10	0.020	Min	0.012
	INS-1	94.803	27.9	Normal	85.0	75	0.10	0.020	Min	0.010
C386B	Comm	64.067	18.5	Normal	75.0	80	0.10	0.020	Min	0.011
	MDR	234.489	67.8	Normal	50.0	30	0.25	0.050	Low	0.009
	OPEN	28.721	8.3	Dry	10.0		0.10	0.020	Min	0.013
	OPEN	13.231	3.8	Dry	10.0		0.10	0.020	Min	0.015
	INS-1	5.597	1.6	Normal	85.0	75	0.10	0.020	Min	0.018
C387A	Comm	51.489	22.9	Normal	75.0	80	0.10	0.020	Min	0.012
	Ind	104.150	46.4	Normal	60.0	55	0.15	0.030	Min	0.010
	MDR	6.458	2.9	Normal	50.0	30	0.25	0.050	Low	0.030
	OPEN	49.853	22.2	Dry	10.0		0.10	0.020	Min	0.012
	OPEN	0.510	0.2	Dry	10.0		0.10	0.020	Min	0.024
	INS-1	12.157	5.4	Normal	85.0	75	0.10	0.020	Min	0.016
C387B	MDR	82.038	37.9	Normal	50.0	30	0.25	0.050	Low	0.015
	OPEN	4.826	2.2	Dry	10.0		0.10	0.020	Min	0.018
	INS-1	6.428	3.0	Normal	85.0	75	0.10	0.020	Min	0.017
	VLDR	123.241	56.9	Normal	30.0	5	0.30	0.050	Low	0.013
C387C	Comm	11.637	7.3	Normal	75.0	80	0.10	0.020	Min	0.016
	MDR	137.423	86.1	Normal	50.0	30	0.25	0.050	Low	0.012
	OPEN	4.527	2.8	Dry	10.0		0.10	0.020	Min	0.018
	OPEN	6.047	3.8	Dry	10.0		0.10	0.020	Min	0.018
C388A	Comm	4.454	2.7	Normal	75.0	80	0.10	0.020	Min	0.018
	MDR	154.479	93.1	Normal	50.0	30	0.25	0.050	Low	0.011
	OPEN	1.760	1.1	Dry	10.0		0.10	0.020	Min	0.021
	OPEN	5.224	3.1	Dry	10.0		0.10	0.020	Min	0.018
C388B	MDR	22.294	10.3	Normal	50.0	30	0.25	0.050	Low	0.023
	MFR	34.156	15.7	Normal	50.0	45	0.25	0.050	Low	0.020
	OPEN	69.539	32.0	Dry	10.0		0.10	0.020	Min	0.011
	INS-1	91.382	42.0	Normal	85.0	75	0.10	0.020	Min	0.010
C388C	Comm	10.215	30.3	Normal	75.0	80	0.10	0.020	Min	0.016
	MDR	23.553	69.7	Normal	50.0	30	0.25	0.050	Low	0.023

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
C388D	Comm	11.516	9.5	Normal	75.0	80	0.10	0.020	Min	0.016
	MDR	59.925	49.3	Normal	50.0	30	0.25	0.050	Low	0.017
	MFR	26.146	21.5	Normal	50.0	45	0.25	0.050	Low	0.022
	OPEN	5.030	4.1	Dry	10.0		0.10	0.020	Min	0.018
	INS-1	18.901	15.6	Normal	85.0	75	0.10	0.020	Min	0.014
C388E	Comm	10.259	10.6	Normal	75.0	80	0.10	0.020	Min	0.016
	MDR	54.375	56.2	Normal	50.0	30	0.25	0.050	Low	0.018
	MFR	9.478	9.8	Normal	50.0	45	0.25	0.050	Low	0.028
	OPEN	22.670	23.4	Dry	10.0		0.10	0.020	Min	0.014
C389A	Comm	12.027	6.4	Normal	75.0	80	0.10	0.020	Min	0.016
	MDR	153.452	82.1	Normal	50.0	30	0.25	0.050	Low	0.011
	MFR	11.292	6.0	Normal	50.0	45	0.25	0.050	Low	0.027
	OPEN	10.249	5.5	Dry	10.0		0.10	0.020	Min	0.016
C389B	Comm	6.815	8.4	Normal	75.0	80	0.10	0.020	Min	0.017
	Ind	14.131	17.4	Normal	60.0	55	0.15	0.030	Min	0.015
	MDR	41.175	50.7	Normal	50.0	30	0.25	0.050	Low	0.019
	MFR	19.143	23.6	Normal	50.0	45	0.25	0.050	Low	0.024
C389C	Comm	19.026	43.0	Normal	75.0	80	0.10	0.020	Min	0.014
	Ind	25.198	57.0	Normal	60.0	55	0.15	0.030	Min	0.014
C389D	MDR	18.545	100.0	Normal	50.0	30	0.25	0.050	Low	0.024
C389E	Comm	3.502	11.3	Normal	75.0	80	0.10	0.020	Min	0.019
	MFR	14.010	45.1	Normal	50.0	45	0.25	0.050	Low	0.026
	INS-1	13.540	43.6	Normal	85.0	75	0.10	0.020	Min	0.015
C389F	OPEN	69.100	100.0	Dry	10.0		0.10	0.020	Min	0.011
C390A	Comm	23.946	12.6	Normal	75.0	80	0.10	0.020	Min	0.014
	MDR	128.883	67.8	Normal	50.0	30	0.25	0.050	Low	0.012
	OPEN	37.312	19.6	Dry	10.0		0.10	0.020	Min	0.013
C390B	Comm	22.878	18.2	Normal	75.0	80	0.10	0.020	Min	0.014
	MDR	74.689	59.5	Normal	50.0	30	0.25	0.050	Low	0.016
	MFR	16.395	13.1	Normal	50.0	45	0.25	0.050	Low	0.025
	VLDR	11.508	9.2	Normal	30.0	5	0.30	0.050	Low	0.027

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
C390C	Comm	10.343	17.1	Normal	75.0	80	0.10	0.020	Min	0.016
	MDR	50.226	82.9	Normal	50.0	30	0.25	0.050	Low	0.018
C390D	MDR	46.518	100.0	Normal	50.0	30	0.25	0.050	Low	0.018
C390E	Comm	1.374	0.9	Normal	75.0	80	0.10	0.020	Min	0.022
	MDR	84.316	57.2	Normal	50.0	30	0.25	0.050	Low	0.015
	OPEN	9.253	6.3	Dry	10.0		0.10	0.020	Min	0.016
	INS-1	52.446	35.6	Normal	85.0	75	0.10	0.020	Min	0.012
C391A	Comm	2.681	3.9	Normal	75.0	80	0.10	0.020	Min	0.020
	MDR	40.189	58.5	Normal	50.0	30	0.25	0.050	Low	0.019
	MFR	25.886	37.6	Normal	50.0	45	0.25	0.050	Low	0.022
C391B	MDR	36.036	100.0	Normal	50.0	30	0.25	0.050	Low	0.020
C391C	MDR	42.802	100.0	Normal	50.0	30	0.25	0.050	Low	0.019
C391D	MDR	15.670	82.8	Normal	50.0	30	0.25	0.050	Low	0.025
	MFR	3.266	17.2	Normal	50.0	45	0.25	0.050	Low	0.034
C391E	MDR	55.111	100.0	Normal	50.0	30	0.25	0.050	Low	0.017
C391F	MDR	12.111	100.0	Normal	50.0	30	0.25	0.050	Low	0.027
C391G	INS-1	13.283	100.0	Normal	85.0	75	0.10	0.020	Min	0.015
C391H	MDR	29.677	100.0	Normal	50.0	30	0.25	0.050	Low	0.021
C391I	MDR	37.651	100.0	Normal	50.0	30	0.25	0.050	Low	0.020
C391J	MDR	5.416	100.0	Normal	50.0	30	0.25	0.050	Low	0.031
C391K	MDR	16.544	100.0	Normal	50.0	30	0.25	0.050	Low	0.025
C391L	Comm	10.323	100.0	Normal	75.0	80	0.10	0.020	Min	0.016
C391M	Comm	8.061	100.0	Normal	75.0	80	0.10	0.020	Min	0.017
C391N	OPEN	91.657	100.0	Dry	10.0		0.10	0.020	Min	0.010
C401A	Comm	35.453	39.5	Normal	75.0	80	0.10	0.020	Min	0.013
	Desert	24.898	27.7	Dry	25.0		0.35	0.030	Low	0.022
	OPEN	9.157	10.2	Dry	10.0		0.10	0.020	Min	0.016
	VLDR	20.334	22.6	Normal	30.0	5	0.30	0.050	Low	0.023

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
C401B	Comm	35.716	56.3	Normal	75.0	80	0.10	0.020	Min	0.013
	OPEN	10.715	16.9	Dry	10.0		0.10	0.020	Min	0.016
	VLDR	16.985	26.8	Normal	30.0	5	0.30	0.050	Low	0.025
C406A	Comm	17.541	27.7	Normal	75.0	80	0.10	0.020	Min	0.015
	MFR	17.464	27.6	Normal	50.0	45	0.25	0.050	Low	0.024
	OPEN	12.104	19.1	Dry	10.0		0.10	0.020	Min	0.016
	VLDR	16.258	25.7	Normal	30.0	5	0.30	0.050	Low	0.025
C406B	MDR	46.457	100.0	Normal	50.0	30	0.25	0.050	Low	0.018
C406C	Comm	5.171	11.1	Normal	75.0	80	0.10	0.020	Min	0.018
	MDR	41.392	88.9	Normal	50.0	30	0.25	0.050	Low	0.019
C406D	OPEN	21.223	100.0	Dry	10.0		0.10	0.020	Min	0.014
C406E	MDR	34.575	100.0	Normal	50.0	30	0.25	0.050	Low	0.020
C406F	MDR	65.349	100.0	Normal	50.0	30	0.25	0.050	Low	0.016
C406G	MDR	34.203	49.5	Normal	50.0	30	0.25	0.050	Low	0.020
	OPEN	34.827	50.5	Dry	10.0		0.10	0.020	Min	0.013
C406H	OPEN	91.562	53.1	Dry	10.0		0.10	0.020	Min	0.010
	OPEN	80.818	46.9	Dry	10.0		0.10	0.020	Min	0.011

* Custom Value (not default value)

FUTURE SUBBASIN INFORMATION

Flood Control District of Maricopa County
ACDC FUTURE - GLENDALE/PEORIA ADMP UPDATE

Sub Basin Data

5/16/2001

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Area ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
C371A	0.53	1.40	22.0	22.0	Urban	0.010	0.19	0.17	6.80	0.17	46	Tc (hrs)	0.45	0.35	0.32	0.28	0.26	0.25
												R (hrs)	0.29	0.22	0.19	0.17	0.16	0.15
C371B	0.54	1.53	17.0	17.0	Urban	0.010	0.20	0.16	7.00	0.15	43	Tc (hrs)	0.54	0.42	0.37	0.33	0.31	0.29
												R (hrs)	0.37	0.28	0.25	0.22	0.20	0.19
C373A	0.14	0.70	17.0	17.0	Urban	0.014	0.14	0.15	7.00	0.16	66	Tc (hrs)	0.36	0.30	0.27	0.25	0.23	0.22
												R (hrs)	0.28	0.22	0.20	0.18	0.17	0.16
C373B	0.10	0.63	21.0	21.0	Urban	0.016	0.16	0.25	5.10	0.34 *	61	Tc (hrs)	0.37	0.29	0.26	0.24	0.23	0.21
												R (hrs)	0.32	0.24	0.22	0.19	0.18	0.17
C384A	0.35	1.27	24.0	24.0	Urban	0.011	0.14	0.15	8.80	0.08	61	Tc (hrs)	0.39	0.32	0.29	0.26	0.25	0.24
												R (hrs)	0.29	0.23	0.21	0.18	0.18	0.17
C384B	0.34	1.18	19.0	19.0	Urban	0.014	0.27	0.25	5.40	0.24	16	Tc (hrs)	0.73	0.50	1.58	0.35	0.33	0.30
												R (hrs)	0.55	0.36	1.30	0.25	0.23	0.21
C384C	0.25	0.95	18.0	18.0	Urban	0.013	0.23	0.16	8.00	0.10	32	Tc (hrs)	0.45	0.35	0.31	0.28	0.26	0.25
												R (hrs)	0.33	0.25	0.22	0.19	0.17	0.17
C385A	0.30	1.05	17.0	17.0	Urban	0.012	0.20	0.15	9.70	0.06	46	Tc (hrs)	0.44	0.35	0.32	0.28	0.27	0.25
												R (hrs)	0.31	0.24	0.22	0.19	0.18	0.17
C385B	0.20	0.62	17.0	17.0	Urban	0.016	0.22	0.15	8.00	0.10	41	Tc (hrs)	0.39	0.30	0.28	0.25	0.24	0.23
												R (hrs)	0.22	0.17	0.15	0.14	0.13	0.12
C385C	0.10	0.60	15.0	15.0	Urban	0.018	0.22	0.15	7.30 *	0.13 *	39	Tc (hrs)	0.45	0.35	0.31	0.28	0.26	0.25
												R (hrs)	0.38	0.29	0.26	0.23	0.21	0.20
C385D	0.07	0.51	15.0	15.0	Urban	0.018	0.25	0.19	6.60	0.17	30	Tc (hrs)	0.43	0.32	0.29	0.25	0.24	0.23
												R (hrs)	0.38	0.27	0.24	0.21	0.19	0.19
C385E	0.23	0.88	16.0	16.0	Urban	0.014	0.19	0.15	8.80	0.08	50	Tc (hrs)	0.44	0.35	1.58	0.29	0.27	0.25
												R (hrs)	0.31	0.24	1.28	0.19	0.18	0.17
C392A	0.26	0.92	17.0	17.0	Urban	0.011	0.24	0.25	5.70	0.25 *	30	Tc (hrs)	0.47	0.34	0.30	0.26	0.24	0.23
												R (hrs)	0.32	0.23	0.19	0.17	0.16	0.15

* Non default value

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Area ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
C392B	0.34	0.84	20.0	20.0	Urban	0.013	0.16	0.21	6.40	0.21	59	Tc (hrs)	0.38	0.31	0.28	0.25	0.23	0.23
												R (hrs)	0.21	0.16	0.14	0.13	0.12	0.11
C392C	0.05	0.45	23.0	23.0	Urban	0.021	0.20	0.15	7.60	0.12	45	Tc (hrs)	0.33	0.26	0.24	0.22	0.21	0.20
												R (hrs)	0.30	0.24	0.22	0.20	0.19	0.18
C392D	0.19	0.93	19.0	19.0	Urban	0.018	0.21	0.22	6.40	0.19	44	Tc (hrs)	0.57	0.44	0.39	0.34	0.32	0.30
												R (hrs)	0.48	0.36	0.31	0.27	0.25	0.23
C392E	0.15	0.82	13.0	13.0	Urban	0.017	0.20	0.25	5.60 *	0.27 *	50	Tc (hrs)	0.60	0.46	0.41	0.35	0.33	0.31
												R (hrs)	0.52	0.39	0.34	0.29	0.27	0.25
C393A	0.11	0.67	14.0	14.0	Urban	0.020	0.24	0.15	8.80	0.07	38	Tc (hrs)	0.52	0.41	0.37	0.33	0.30	0.29
												R (hrs)	0.46	0.35	0.31	0.28	0.26	0.24
C393B	0.06	0.45	14.0	14.0	Urban	0.020	0.25	0.15	7.60	0.12 *	30	Tc (hrs)	0.42	0.32	0.29	0.25	0.24	0.23
												R (hrs)	0.39	0.29	0.25	0.22	0.21	0.20
C393C	0.07	0.59	14.0	14.0	Urban	0.019	0.25	0.13	10.10	0.04	30	Tc (hrs)	0.45	0.35	0.32	0.29	0.27	0.25
												R (hrs)	0.46	0.36	0.32	0.28	0.27	0.25
C393D	0.03	0.34	15.0	15.0	Urban	0.027	0.25	0.15	9.70	0.06	33	Tc (hrs)	0.39	0.31	0.28	0.25	0.24	0.23
												R (hrs)	0.41	0.31	0.28	0.25	0.23	0.22
C393E	0.09	0.53	15.0	15.0	Urban	0.017	0.25	0.15	8.00	0.10	30	Tc (hrs)	0.40	0.30	0.28	0.25	0.23	0.23
												R (hrs)	0.32	0.24	0.22	0.19	0.18	0.17
C393F	0.02	0.23	15.0	15.0	Urban	0.027	0.25	0.15	8.80	0.07	30	Tc (hrs)	0.30	0.24	0.23	0.21	0.20	0.19
												R (hrs)	0.28	0.23	0.21	0.19	0.18	0.17
C393G	0.02	0.32	11.0	11.0	Urban	0.015	0.10	0.15	9.70 *	0.06 *	75	Tc (hrs)	0.26	0.23	0.21	0.20	0.18	0.18
												R (hrs)	0.30	0.26	0.24	0.22	0.20	0.20
C393H	0.05	0.37	11.0	11.0	Urban	0.021	0.25	0.15	9.70	0.06	30	Tc (hrs)	0.40	0.31	0.28	0.25	0.24	0.23
												R (hrs)	0.35	0.27	0.24	0.21	0.20	0.19
C393I	0.06	0.49	18.0	18.0	Urban	0.020	0.25	0.19	6.60	0.17	30	Tc (hrs)	0.42	0.31	0.28	0.25	0.23	0.23
												R (hrs)	0.40	0.29	0.25	0.23	0.21	0.20

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Area ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
C393J	0.01	0.15	10.0	10.0	Urban	0.031	0.25	0.15	8.80	0.07	30	Tc (hrs)	0.29	0.24	0.22	0.20	0.19	0.18
												R (hrs)	0.32	0.26	0.24	0.22	0.20	0.19
C393K	0.03	0.30	15.0	15.0	Urban	0.025	0.25	0.25	5.20	0.30 *	30	Tc (hrs)	0.43	0.30	0.26	0.23	0.22	0.21
												R (hrs)	0.44	0.30	0.26	0.22	0.21	0.20
C393L	0.02	0.13	15.0	15.0	Urban	0.016	0.10	0.25	4.90	0.41	80	Tc (hrs)	0.16	0.14	0.13	0.12	0.11	0.11
												R (hrs)	0.10	0.09	0.08	0.07	0.07	0.07
C393M	0.01	0.07	36.0	36.0	Urban	0.017	0.10	0.25	5.60	0.31	80	Tc (hrs)	0.09	0.08	0.08	0.08	0.08	0.08
												R (hrs)	0.04	0.03	0.03	0.03	0.03	0.03
C393N	0.14	1.38	14.0	14.0	Urban	0.010	0.10	0.29	8.40	0.06		Tc (hrs)	0.59	0.43	0.38	0.33	0.31	0.29
												R (hrs)	0.80	0.56	0.49	0.43	0.39	0.37
C394A	0.10	0.51	13.0	13.0	Urban	0.019	0.18	0.25	5.30 *	0.30 *	58	Tc (hrs)	0.45	0.35	0.31	0.28	0.26	0.25
												R (hrs)	0.33	0.25	0.22	0.20	0.18	0.17
C394B	0.07	0.56	12.0	12.0	Urban	0.018	0.25	0.15	8.80	0.07	30	Tc (hrs)	0.46	0.36	0.33	0.29	0.27	0.25
												R (hrs)	0.44	0.33	0.30	0.26	0.24	0.23
C394C	0.07	0.59	9.0	9.0	Urban	0.019	0.23	0.15	8.00	0.10	36	Tc (hrs)	0.58	0.44	0.39	0.35	0.33	0.30
												R (hrs)	0.58	0.44	0.38	0.34	0.31	0.29
C394D	0.03	0.12	33.0	33.0	Urban	0.014	0.10	0.30	8.00	0.07		Tc (hrs)	0.12	0.10	0.09	0.08	0.08	0.08
												R (hrs)	0.04	0.04	0.03	0.03	0.03	0.03
C394E	0.05	0.45	10.0	10.0	Urban	0.020	0.25	0.25	4.80	0.36 *	30	Tc (hrs)	0.60	0.42	0.36	0.31	0.28	0.26
												R (hrs)	0.58	0.40	0.34	0.28	0.25	0.23
C394F	0.10	0.57	14.0	14.0	Urban	0.016	0.25	0.25	5.80 *	0.23 *	30	Tc (hrs)	0.48	0.35	0.30	0.26	0.25	0.23
												R (hrs)	0.38	0.27	0.23	0.20	0.18	0.17
C394G	0.11	0.97	14.0	14.0	Urban	0.016	0.25	0.25	4.90	0.35 *	30	Tc (hrs)	0.75	0.53	0.46	0.39	0.35	0.33
												R (hrs)	0.94	0.63	0.54	0.45	0.41	0.37
C394H	0.27	1.27	20.0	20.0	Urban	0.013	0.18	0.31	5.30	0.34 *	16	Tc (hrs)	0.80	0.52	0.43	0.36	0.33	0.30
												R (hrs)	0.74	0.46	0.37	0.30	0.27	0.25

Sub Basin Data

Basin: 01 Storms: Multiple Duration: 6 Hour Loss Method: Green-Ampt Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Area ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
C401A	0.29	0.90	14.0	14.0	Urban	0.013	0.23	0.16	8.80	0.07	32	Tc (hrs)	0.48	0.37	0.33	0.30	0.28	0.26
												R (hrs)	0.30	0.23	0.20	0.18	0.16	0.16
C401B	0.13	0.75	16.0	16.0	Urban	0.019	0.22	0.15	8.40 *	0.09 *	42	Tc (hrs)	0.51	0.40	0.36	1.58	0.30	0.28
												R (hrs)	0.45	0.35	0.31	1.58	0.25	0.24
C401C	0.07	0.65	25.0	25.0	Urban	0.014	0.13	0.21	6.40	0.21	66	Tc (hrs)	0.30	0.25	0.23	0.21	0.20	0.19
												R (hrs)	0.32	0.25	0.23	0.22	0.20	0.19
C401D	0.03	0.26	15.0	15.0	Urban	0.024	0.25	0.15	8.40	0.09 *	30	Tc (hrs)	0.30	0.25	0.23	0.21	0.20	0.19
												R (hrs)	0.25	0.20	0.18	0.17	0.16	0.15
C401E	0.05	0.25	16.0	16.0	Urban	0.020	0.17	0.15	7.60	0.12 *	62	Tc (hrs)	0.24	0.21	0.20	0.18	0.17	0.16
												R (hrs)	0.14	0.12	0.11	0.10	0.10	0.09
C401F	0.11	1.19	15.0	15.0	Urban	0.011	0.10	0.30	8.00	0.07		Tc (hrs)	0.56	0.40	0.36	0.32	0.29	0.28
												R (hrs)	0.80	0.55	0.48	0.42	0.39	0.36

FUTURE SOIL INFORMATION

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
C371A	Maricopa	C_LB	7.812	2.3	0.40		
	Maricopa	C_LCA	164.325	48.3	0.25		
	Maricopa	C_LE	47.743	14.0	0.04		
	Maricopa	C_MP	16.690	4.9	0.25		
	Maricopa	C_MR	35.197	10.3	0.05		
	Maricopa	C_RBA	3.041	0.9	0.26		
	Maricopa	C_TG	7.252	2.1	0.04		
	Maricopa	C_TW	42.169	12.4	0.05		
	Maricopa	C_VF	15.913	4.7	0.01		
C371B	Maricopa	C_AA	0.006		0.26		
	Maricopa	C_LB	0.146		0.40		
	Maricopa	C_LCA	164.031	47.4	0.25		
	Maricopa	C_LE	3.596	1.0	0.04		
	Maricopa	C_MP	0.025		0.25		
	Maricopa	C_MR	55.728	16.1	0.05		
	Maricopa	C_RBA	10.643	3.1	0.26		
	Maricopa	C_TG	9.707	2.8	0.04		
	Maricopa	C_TW	74.389	21.5	0.05		
	Maricopa	C_VF	27.829	8.0	0.01		
C373A	Maricopa	C_LCA	13.470	15.0	0.25		
	Maricopa	C_MP	25.022	27.9	0.25		
	Maricopa	C_MR	19.259	21.4	0.05		
	Maricopa	C_TC	2.064	2.3	0.40		
	Maricopa	C_TG	2.535	2.8	0.04		
	Maricopa	C_TW	23.350	26.0	0.05		
	Maricopa	C_VF	4.102	4.6	0.01		
C373B	Maricopa	C_GXA	0.505	0.8	0.23		
	Maricopa	C_LCA	55.378	87.3	0.25		
	Maricopa	C_LE	0.001		0.04		
	Maricopa	C_MR	2.669	4.2	0.05		
	Maricopa	C_PEB	0.139	0.2	0.38		
	Maricopa	C_TE	2.336	3.7	0.25		
	Maricopa	C_TG	0.121	0.2	0.04		
	Maricopa	C_TW	2.274	3.6	0.05		
C384A	Maricopa	C_ES	7.532	3.4	0.25		
	Maricopa	C_LCA	20.653	9.2	0.25		
	Maricopa	C_LE	14.736	6.6	0.04		
	Maricopa	C_MR	110.447	49.2	0.05		
	Maricopa	C_MS	3.901	1.7	0.01		
	Maricopa	C_TG	2.063	0.9	0.04		
	Maricopa	C_TW	53.682	23.9	0.05		
	Maricopa	C_VF	11.603	5.2	0.01		
C384B	Maricopa	C_GXA	0.427	0.2	0.23		
	Maricopa	C_LCA	111.288	51.4	0.25		
	Maricopa	C_MP	43.882	20.3	0.25		
	Maricopa	C_MR	29.181	13.5	0.05		
	Maricopa	C_PEA	4.456	2.1	0.37		
	Maricopa	C_RBA	16.268	7.5	0.26		
	Maricopa	C_TG	3.284	1.5	0.04		
	Maricopa	C_TU	0.673	0.3	0.25		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
C384B	Maricopa	C_TW	7.067	3.3	0.05		
C384C	Maricopa	C_LCA	23.894	15.0	0.25		
	Maricopa	C_MP	1.572	1.0	0.25		
	Maricopa	C_MR	44.852	28.1	0.05		
	Maricopa	C_TG	0.472	0.3	0.04		
	Maricopa	C_TU	4.075	2.6	0.25		
	Maricopa	C_TW	84.612	53.1	0.05		
C385A	Maricopa	C_LCA	6.718	3.5	0.25		
	Maricopa	C_LE	30.217	15.9	0.04		
	Maricopa	C_MR	54.719	28.8	0.05		
	Maricopa	C_TG	3.158	1.7	0.04		
	Maricopa	C_TW	52.588	27.7	0.05		
	Maricopa	C_VF	42.685	22.5	0.01		
C385B	Maricopa	C_LCA	32.582	26.0	0.25		
	Maricopa	C_LE	11.877	9.5	0.04		
	Maricopa	C_MR	52.745	42.0	0.05		
	Maricopa	C_TW	22.439	17.9	0.05		
	Maricopa	C_VF	5.826	4.6	0.01		
C385C	Maricopa	C_LCA	17.703	29.2	0.25		
	Maricopa	C_MR	32.858	54.2	0.05		
	Maricopa	C_TG	0.801	1.3	0.04		
	Maricopa	C_TU	6.311	10.4	0.25		
	Maricopa	C_TW	2.920	4.8	0.05		
C385D	Maricopa	C_LCA	28.133	60.5	0.25		
	Maricopa	C_MR	3.149	6.8	0.05		
	Maricopa	C_TW	12.207	26.2	0.05		
	Maricopa	C_VF	3.029	6.5	0.01		
C385E	Maricopa	C_LCA	36.474	24.8	0.25		
	Maricopa	C_LE	18.853	12.8	0.04		
	Maricopa	C_MR	36.938	25.1	0.05		
	Maricopa	C_TW	17.215	11.7	0.05		
	Maricopa	C_VF	37.878	25.7	0.01		
C392A	Maricopa	C_GXA	10.850	6.5	0.23		
	Maricopa	C_LCA	74.273	44.8	0.25		
	Maricopa	C_MP	22.819	13.8	0.25		
	Maricopa	C_MR	16.011	9.7	0.05		
	Maricopa	C_PEA	4.829	2.9	0.37		
	Maricopa	C_RBA	16.099	9.7	0.26		
	Maricopa	C_TU	4.751	2.9	0.25		
	Maricopa	C_TW	8.323	5.0	0.05		
	Maricopa	C_VF	7.890	4.8	0.01		
C392B	Maricopa	C_GXA	2.456	1.1	0.23		
	Maricopa	C_LCA	53.554	24.6	0.25		
	Maricopa	C_LE	1.645	0.8	0.04		
	Maricopa	C_MP	60.118	27.7	0.25		
	Maricopa	C_MR	66.399	30.5	0.05		
	Maricopa	C_RBA	8.294	3.8	0.26		
	Maricopa	C_TU	1.826	0.8	0.25		

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* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
C392B	Maricopa	C_TW	22.686	10.4	0.05		
	Maricopa	C_VF	0.413	0.2	0.01		
C392C	Maricopa	C_LCA	8.761	26.0	0.25		
	Maricopa	C_MR	18.297	54.2	0.05		
	Maricopa	C_TW	6.701	19.8	0.05		
C392D	Maricopa	C_GXA	6.754	5.6	0.23		
	Maricopa	C_LCA	49.907	41.1	0.25		
	Maricopa	C_MP	12.914	10.6	0.25		
	Maricopa	C_MR	23.218	19.1	0.05		
	Maricopa	C_RBA	3.812	3.1	0.26		
	Maricopa	C_TU	6.533	5.4	0.25		
	Maricopa	C_TW	8.592	7.1	0.05		
	Maricopa	C_VF	9.779	8.0	0.01		
C392E	Maricopa	C_GXA	2.196	2.3	0.23		
	Maricopa	C_LCA	63.898	66.0	0.25		
	Maricopa	C_MP	13.535	14.0	0.25		
	Maricopa	C_MR	2.094	2.2	0.05		
	Maricopa	C_RBA	1.600	1.7	0.26		
	Maricopa	C_TW	10.982	11.3	0.05		
	Maricopa	C_VF	2.538	2.6	0.01		
C393A	Maricopa	C_AO	4.595	6.7	0.04		
	Maricopa	C_LCA	4.208	6.1	0.25		
	Maricopa	C_LE	1.939	2.8	0.04		
	Maricopa	C_MR	16.189	23.5	0.05		
	Maricopa	C_TU	2.578	3.7	0.25		
	Maricopa	C_TW	32.993	47.9	0.05		
	Maricopa	C_VF	6.336	9.2	0.01		
C393B	Maricopa	C_AO	14.425	40.0	0.04		
	Maricopa	C_LCA	12.105	33.6	0.25		
	Maricopa	C_MR	7.618	21.1	0.05		
	Maricopa	C_TW	1.894	5.3	0.05		
C393C	Maricopa	C_LCA	1.053	2.5	0.25		
	Maricopa	C_LE	4.495	10.5	0.04		
	Maricopa	C_MR	3.268	7.6	0.05		
	Maricopa	C_TW	21.222	49.5	0.05		
	Maricopa	C_VF	12.806	29.9	0.01		
C393D	Maricopa	C_LE	8.823	46.6	0.04		
	Maricopa	C_MR	6.276	33.1	0.05		
	Maricopa	C_TW	1.456	7.7	0.05		
	Maricopa	C_VF	2.381	12.6	0.01		
C393E	Maricopa	C_GXA	0.698	1.3	0.23		
	Maricopa	C_LCA	13.613	24.7	0.25		
	Maricopa	C_LE	0.515	0.9	0.04		
	Maricopa	C_MR	16.592	30.1	0.05		
	Maricopa	C_TW	22.526	40.9	0.05		
	Maricopa	C_VF	1.139	2.1	0.01		
C393F	Maricopa	C_MR	5.340	44.1	0.05		

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* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
C393F	Maricopa	C_TW	6.774	55.9	0.05		
C393G	Maricopa	C_AO	0.281	2.1	0.04		
	Maricopa	C_MR	10.027	75.6	0.05		
	Maricopa	C_TW	2.067	15.6	0.05		
	Maricopa	C_VF	0.885	6.7	0.01		
C393H	Maricopa	C_AO	5.973	20.1	0.04		
	Maricopa	C_LCA	2.255	7.6	0.25		
	Maricopa	C_LE	0.507	1.7	0.04		
	Maricopa	C_MR	3.459	11.7	0.05		
	Maricopa	C_TW	10.681	36.0	0.05		
	Maricopa	C_VF	6.801	22.9	0.01		
C393I	Maricopa	C_GXA	0.832	2.2	0.23		
	Maricopa	C_LCA	18.559	49.3	0.25		
	Maricopa	C_MP	0.813	2.2	0.25		
	Maricopa	C_MR	10.986	29.2	0.05		
	Maricopa	C_TW	6.473	17.2	0.05		
C393J	Maricopa	C_MR	4.975	91.9	0.05		
	Maricopa	C_TW	0.440	8.1	0.05		
C393K	Maricopa	C_LCA	12.154	73.5	0.25		
	Maricopa	C_MP	2.705	16.4	0.25		
	Maricopa	C_MR	1.685	10.2	0.05		
C393L	Maricopa	C_LCA	10.019	97.1	0.25		
	Maricopa	C_MR	0.065	0.6	0.05		
	Maricopa	C_TW	0.239	2.3	0.05		
C393M	Maricopa	C_LCA	6.547	81.2	0.25		
	Maricopa	C_LE	0.534	6.6	0.04		
	Maricopa	C_TW	0.980	12.2	0.05		
C393N	Maricopa	C_LCA	12.421	13.6	0.25		
	Maricopa	C_LE	12.730	13.9	0.04		
	Maricopa	C_MR	37.648	41.1	0.05		
	Maricopa	C_TW	24.383	26.6	0.05		
	Maricopa	C_VF	4.483	4.9	0.01		
C394A	Maricopa	C_LCA	51.850	81.9	0.25		
	Maricopa	C_MP	3.477	5.5	0.25		
	Maricopa	C_MR	7.994	12.6	0.05		
C394B	Maricopa	C_LCA	9.759	21.0	0.25		
	Maricopa	C_MP	0.095	0.2	0.25		
	Maricopa	C_MR	25.118	54.1	0.05		
	Maricopa	C_VF	11.495	24.7	0.01		
C394C	Maricopa	C_LCA	7.452	16.0	0.25		
	Maricopa	C_LE	2.598	5.6	0.04		
	Maricopa	C_MP	13.359	28.7	0.25		
	Maricopa	C_MR	12.130	26.0	0.05		
	Maricopa	C_VF	11.066	23.7	0.01		
C394D	Maricopa	C_LCA	0.020	0.1	0.25		
	Maricopa	C_MP	12.395	58.4	0.25		

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* XKSAT value is zero.

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
	Maricopa	C_MR	1.495	7.0	0.05		
	Maricopa	C_VF	7.312	34.5	0.01		
C394E	Maricopa	C_LCA	16.364	47.3	0.25		
	Maricopa	C_MP	18.210	52.7	0.25		
C394F	Maricopa	C_LCA	35.689	54.6	0.25		
	Maricopa	C_MP	12.591	19.3	0.25		
	Maricopa	C_MR	17.067	26.1	0.05		
	Maricopa	C_VF	0.001		0.01		
C394G	Maricopa	C_LCA	60.096	87.1	0.25		
	Maricopa	C_MP	6.629	9.6	0.25		
	Maricopa	C_MR	2.247	3.3	0.05		
	Maricopa	C_TD	0.030		1.20		
C394H	Maricopa	C_ABA	6.318	3.7	0.38		
	Maricopa	C_GGA	15.170	8.8	0.25		
	Maricopa	C_LCA	82.887	48.1	0.25		
	Maricopa	C_MP	27.387	15.9	0.25		
	Maricopa	C_MR	28.409	16.5	0.05		
	Maricopa	C_RBA	7.519	4.4	0.26		
	Maricopa	C_TD	1.346	0.8	1.20		
	Maricopa	C_TFA	2.965	1.7	0.37		
	Maricopa	C_VF	0.412	0.2	0.01		
C401A	Maricopa	C_GXA	2.165	1.2	0.23		
	Maricopa	C_LCA	10.176	5.4	0.25		
	Maricopa	C_LE	23.403	12.5	0.04		
	Maricopa	C_MR	115.979	62.0	0.05		
	Maricopa	C_MS	1.260	0.7	0.01		
	Maricopa	C_TG	27.395	14.7	0.04		
	Maricopa	C_VF	6.608	3.5	0.01		
C401B	Maricopa	C_GXA	0.283	0.3	0.23		
	Maricopa	C_LCA	25.533	31.4	0.25		
	Maricopa	C_MP	4.452	5.5	0.25		
	Maricopa	C_MR	30.883	38.0	0.05		
	Maricopa	C_TG	3.438	4.2	0.04		
	Maricopa	C_VF	16.670	20.5	0.01		
C401C	Maricopa	C_LCA	25.304	57.3	0.25		
	Maricopa	C_LE	1.803	4.1	0.04		
	Maricopa	C_MP	1.436	3.2	0.25		
	Maricopa	C_MR	14.494	32.8	0.05		
	Maricopa	C_TW	1.149	2.6	0.05		
	Maricopa	C_VF	0.005		0.01		
C401D	Maricopa	C_LCA	4.594	24.7	0.25		
	Maricopa	C_MR	9.338	50.3	0.05		
	Maricopa	C_MS	2.221	12.0	0.01		
	Maricopa	C_TG	2.429	13.1	0.04		
C401E	Maricopa	C_LCA	11.270	36.3	0.25		
	Maricopa	C_LE	6.693	21.6	0.04		
	Maricopa	C_MP	0.274	0.9	0.25		

* Custom Value (not default value)

* XKSAT value is zero.

Soil Data

Area Id	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
C401E	Maricopa	C_MR	11.214	36.1	0.05		
	Maricopa	C_VF	1.601	5.2	0.01		
C401F	Maricopa	C_LCA	18.778	27.2	0.25		
	Maricopa	C_LE	3.848	5.6	0.04		
	Maricopa	C_MR	41.333	59.8	0.05		
	Maricopa	C_MS	0.001		0.01		
	Maricopa	C_TG	0.013		0.04		
	Maricopa	C_VF	5.095	7.4	0.01		

* Custom Value (not default value)

* XKSAT value is zero.

FUTURE LAND USE INFORMATION

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
C371A	Ind	45.043	13.2	Normal	60.0	55	0.15	0.030	Min	0.012
	MDR	200.298	58.9	Normal	50.0	30	0.25	0.050	Low	0.010
	INS-1	94.743	27.9	Normal	85.0	75	0.10	0.020	Min	0.010
C371B	Comm	92.788	26.8	Normal	75.0	80	0.10	0.020	Min	0.010
	MDR	234.449	67.7	Normal	50.0	30	0.25	0.050	Low	0.009
	OPEN	13.231	3.8	Dry	10.0		0.10	0.020	Min	0.015
	INS-1	5.597	1.6	Normal	85.0	75	0.10	0.020	Min	0.018
C373A	Comm	64.518	71.8	Normal	75.0	80	0.10	0.020	Min	0.011
	MDR	25.325	28.2	Normal	50.0	30	0.25	0.050	Low	0.022
C373B	Comm	38.996	61.5	Normal	75.0	80	0.10	0.020	Min	0.013
	MDR	24.421	38.5	Normal	50.0	30	0.25	0.050	Low	0.022
C384A	Comm	51.489	22.9	Normal	75.0	80	0.10	0.020	Min	0.012
	Ind	153.955	68.6	Normal	60.0	55	0.15	0.030	Min	0.009
	MDR	6.458	2.9	Normal	50.0	30	0.25	0.050	Low	0.030
	OPEN	0.510	0.2	Dry	10.0		0.10	0.020	Min	0.024
	INS-1	12.157	5.4	Normal	85.0	75	0.10	0.020	Min	0.016
C384B	MDR	82.038	37.9	Normal	50.0	30	0.25	0.050	Low	0.015
	OPEN	4.826	2.2	Dry	10.0		0.10	0.020	Min	0.018
	INS-1	6.428	3.0	Normal	85.0	75	0.10	0.020	Min	0.017
	VLDR	123.241	56.9	Normal	30.0	5	0.30	0.050	Low	0.013
C384C	Comm	11.637	7.3	Normal	75.0	80	0.10	0.020	Min	0.016
	MDR	137.423	86.1	Normal	50.0	30	0.25	0.050	Low	0.012
	OPEN	4.527	2.8	Dry	10.0		0.10	0.020	Min	0.018
	OPEN	6.047	3.8	Dry	10.0		0.10	0.020	Min	0.018
C385A	Comm	61.258	32.2	Normal	75.0	80	0.10	0.020	Min	0.011
	MDR	128.883	67.8	Normal	50.0	30	0.25	0.050	Low	0.012
C385B	Comm	22.878	18.2	Normal	75.0	80	0.10	0.020	Min	0.014
	MDR	86.198	68.7	Normal	50.0	30	0.25	0.050	Low	0.015
	MFR	16.395	13.1	Normal	50.0	45	0.25	0.050	Low	0.025
C385C	Comm	10.343	17.1	Normal	75.0	80	0.10	0.020	Min	0.016
	MDR	50.226	82.9	Normal	50.0	30	0.25	0.050	Low	0.018

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
C385D	MDR	46.518	100.0	Normal	50.0	30	0.25	0.050	Low	0.018
C385E	Comm	10.628	7.2	Normal	75.0	80	0.10	0.020	Min	0.016
	MDR	84.316	57.2	Normal	50.0	30	0.25	0.050	Low	0.015
	INS-1	52.446	35.6	Normal	85.0	75	0.10	0.020	Min	0.012
C392A	Comm	4.454	2.7	Normal	75.0	80	0.10	0.020	Min	0.018
	MDR	156.239	94.2	Normal	50.0	30	0.25	0.050	Low	0.011
	OPEN	5.224	3.1	Dry	10.0		0.10	0.020	Min	0.018
C392B	Ind	69.539	32.0	Normal	60.0	55	0.15	0.030	Min	0.011
	MDR	22.294	10.3	Normal	50.0	30	0.25	0.050	Low	0.023
	MFR	34.156	15.7	Normal	50.0	45	0.25	0.050	Low	0.020
	INS-1	91.382	42.0	Normal	85.0	75	0.10	0.020	Min	0.010
C392C	Comm	10.215	30.3	Normal	75.0	80	0.10	0.020	Min	0.016
	MDR	23.553	69.7	Normal	50.0	30	0.25	0.050	Low	0.023
C392D	Comm	11.516	9.5	Normal	75.0	80	0.10	0.020	Min	0.016
	MDR	59.925	49.3	Normal	50.0	30	0.25	0.050	Low	0.017
	MFR	26.146	21.5	Normal	50.0	45	0.25	0.050	Low	0.022
	OPEN	5.030	4.1	Dry	10.0		0.10	0.020	Min	0.018
	INS-1	18.901	15.6	Normal	85.0	75	0.10	0.020	Min	0.014
C392E	Comm	35.284	36.5	Normal	75.0	80	0.10	0.020	Min	0.013
	MDR	52.020	53.7	Normal	50.0	30	0.25	0.050	Low	0.018
	MFR	9.478	9.8	Normal	50.0	45	0.25	0.050	Low	0.028
C393A	Comm	2.681	3.9	Normal	75.0	80	0.10	0.020	Min	0.020
	MDR	40.189	58.5	Normal	50.0	30	0.25	0.050	Low	0.019
	MFR	25.886	37.6	Normal	50.0	45	0.25	0.050	Low	0.022
C393B	MDR	36.036	100.0	Normal	50.0	30	0.25	0.050	Low	0.020
C393C	MDR	42.802	100.0	Normal	50.0	30	0.25	0.050	Low	0.019
C393D	MDR	15.670	82.8	Normal	50.0	30	0.25	0.050	Low	0.025
	MFR	3.266	17.2	Normal	50.0	45	0.25	0.050	Low	0.034
C393E	MDR	55.111	100.0	Normal	50.0	30	0.25	0.050	Low	0.017
C393F	MDR	12.111	100.0	Normal	50.0	30	0.25	0.050	Low	0.027

* Custom Value (not default value)

Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
C393G	INS-1	13.283	100.0	Normal	85.0	75	0.10	0.020	Min	0.015
C393H	MDR	29.677	100.0	Normal	50.0	30	0.25	0.050	Low	0.021
C393I	MDR	37.651	100.0	Normal	50.0	30	0.25	0.050	Low	0.020
C393J	MDR	5.416	100.0	Normal	50.0	30	0.25	0.050	Low	0.031
C393K	MDR	16.544	100.0	Normal	50.0	30	0.25	0.050	Low	0.025
C393L	Comm	10.323	100.0	Normal	75.0	80	0.10	0.020	Min	0.016
C393M	Comm	8.061	100.0	Normal	75.0	80	0.10	0.020	Min	0.017
C393N	OPEN	91.657	100.0	Dry	10.0		0.10	0.020	Min	0.010
C394A	Comm	29.645	46.8	Normal	75.0	80	0.10	0.020	Min	0.013
	MDR	16.258	25.7	Normal	50.0	30	0.25	0.050	Low	0.025
	MFR	17.464	27.6	Normal	50.0	45	0.25	0.050	Low	0.024
C394B	MDR	46.457	100.0	Normal	50.0	30	0.25	0.050	Low	0.018
C394C	Comm	5.171	11.1	Normal	75.0	80	0.10	0.020	Min	0.018
	MDR	41.392	88.9	Normal	50.0	30	0.25	0.050	Low	0.019
C394D	OPEN	21.223	100.0	Dry	10.0		0.10	0.020	Min	0.014
C394E	MDR	34.575	100.0	Normal	50.0	30	0.25	0.050	Low	0.020
C394F	MDR	65.349	100.0	Normal	50.0	30	0.25	0.050	Low	0.016
C394G	MDR	69.031	100.0	Normal	50.0	30	0.25	0.050	Low	0.016
C394H	MDR	91.562	53.1	Normal	50.0	30	0.25	0.050	Low	0.014
	OPEN	80.818	46.9	Dry	10.0		0.10	0.020	Min	0.011
C401A	Comm	12.027	6.4	Normal	75.0	80	0.10	0.020	Min	0.016
	MDR	153.452	82.1	Normal	50.0	30	0.25	0.050	Low	0.011
	MFR	11.292	6.0	Normal	50.0	45	0.25	0.050	Low	0.027
	OPEN	10.249	5.5	Dry	10.0		0.10	0.020	Min	0.016
C401B	Comm	6.815	8.4	Normal	75.0	80	0.10	0.020	Min	0.017
	Ind	14.131	17.4	Normal	60.0	55	0.15	0.030	Min	0.015
	MDR	41.175	50.7	Normal	50.0	30	0.25	0.050	Low	0.019

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Land Use Data

Area Id	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
C401B	MFR	19.143	23.6	Normal	50.0	45	0.25	0.050	Low	0.024
C401C	Comm	19.026	43.0	Normal	75.0	80	0.10	0.020	Min	0.014
	Ind	25.198	57.0	Normal	60.0	55	0.15	0.030	Min	0.014
C401D	MDR	18.545	100.0	Normal	50.0	30	0.25	0.050	Low	0.024
C401E	Comm	3.502	11.3	Normal	75.0	80	0.10	0.020	Min	0.019
	MFR	14.010	45.1	Normal	50.0	45	0.25	0.050	Low	0.026
	INS-1	13.540	43.6	Normal	85.0	75	0.10	0.020	Min	0.015
C401F	OPEN	69.100	100.0	Dry	10.0		0.10	0.020	Min	0.011

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